~~SECRET~~

CONFIDENTIAL

STUDIES in INTELLIGENCE

VOL. 2 NO. 1 WINTER ~~1958~~

CENTRAL INTELLIGENCE AGENCY

OFFICE OF TRAINING

CONFIDENTIAL

~~SECRET~~

SECRET

CONFIDENTIAL

All opinions expressed in the *Studies* are those of the authors. They do *not* represent the official views of the Central Intelligence Agency or of the Office of Training.

WARNING

This material contains information affecting the National Defense of the United States within the meaning of the espionage laws, Title 18, USC, Secs. 793 and 794, the transmission or revelation of which to an unauthorized person is prohibited by law.

CONFIDENTIAL

SECRET

SECRET

CONFIDENTIAL

STUDIES IN INTELLIGENCE

EDITORIAL POLICY

Articles for the **Studies in Intelligence** *may be written on any theoretical, doctrinal, operational, or historical aspect of intelligence.*

The final responsibility for accepting or rejecting an article rests with the Editorial Board.

The criterion for publication is whether or not, in the opinion of the Board, the article makes a contribution to the literature of intelligence.

CONFIDENTIAL

SECRET

CONFIDENTIAL

CONTRIBUTIONS AND DISTRIBUTION

Contributions to the *Studies* may come from any member of the intelligence community or, upon invitation, from persons outside. Manuscripts should be submitted directly to the Editor, Studies in Intelligence, Room 2013 R & S Building (143- [redacted], and need not be coordinated or submitted through [redacted] nels. They should be typed in duplicate, double-spaced, the original on bond paper. Footnotes should be inserted in the body of the text following the line in which the reference occurs. Articles may be classified through SECRET.

25X1

25X1

For inclusion on the regular *Studies* distribution list call your office dissemination center or the responsible OCR desk, [redacted] For back issues and on other questions call the Office of the Editor, [redacted]

25X1

25X1

25X1

CONFIDENTIAL

SECRET

SECRET

CONFIDENTIAL

CONTENTS

CONFIDENTIAL

SECRET

ORIGIN, MISSIONS, AND STRUCTURE OF CIA

Lyman B. Kirkpatrick

This is a brief summary of the history of the modern origin of the central intelligence concept and thus of the Central Intelligence Agency.

In 1940 the fortunes of Britain and France were at their lowest ebb. Some high-level officials of the US Government were predicting that Great Britain could not hold out against the Germans. To check on this, President Roosevelt sent Colonel William J. Donovan, prominent New York attorney and winner of the Congressional Medal of Honor as Commanding Officer of the 69th Regiment in World War I, abroad to discover and report his estimate of the situation. Donovan first visited the Mediterranean area, and on his second trip talked to leaders of both Britain and France. His report indicated that Britain would hold out, but he urged that the US immediately organize itself for global warfare. Donovan's particular interest was in the intelligence field, and he went to talk to Secretary of the Navy Knox, Secretary of War Stimson, and Attorney General Jackson about his concept of an agency which would combine intelligence with the forces of propaganda and subversion.

On 10 June 1941, Donovan proposed "a service of strategic information." This service would have an advisory panel composed of the chiefs of intelligence of the Army, the Navy, the Department of State, and the FBI. It would draw its personnel from the Army and the Navy and would also have a civilian staff. It would not displace or encroach upon the intelligence prerogatives of the established departments, although it would collect information independently. This was the start of the Office of the Coordinator of Information which combined information, intelligence, and clandestine activities. In 1942, however, the Coordinator of Information was split and the Office of War Information — the predecessor of the present US Information Agency — was created and given the responsibility for all overt attributable propaganda information, and to the Office of Strategic Services went the responsibility for

clandestine activities and for research and analysis of intelligence.

From the OSS the present day intelligence community inherited certain assets. Among these were records and some methods and means of procuring both overt and secret intelligence. There were certain basic counterespionage files developed with the advice and assistance of some foreign intelligence services, particularly the British. There was a considerable reservoir of knowledge of procedures for research and analysis of basic intelligence information. There were some skilled personnel. Finally, but far from last in importance, there were agreements with key foreign intelligence services.

The history of the OSS, and particularly its relationship with other US intelligence organizations during World War II, is far too detailed for discussion in this essay. But it should be noted that shortly after the creation of the Office of Strategic Services, top level officials in the US intelligence community started to think about a peacetime intelligence service. On 25 August 1942, Brigadier General John Magruder wrote a paper on a proposed plan for a joint intelligence bureau which would be an agency of the Joint Chiefs of Staff. For the next two years there was considerable discussion of this and similar papers.

On 5 October 1944 a document was originated in the office of General Donovan entitled "The Basis for a Permanent World-Wide Intelligence Service." Certain of the principles enunciated in this document are interesting to note. This service would collect, analyze, and deliver intelligence on the policy or strategy level. The proposed organization would have its own means of communication and control over its secret operations. It would not interfere with departmental intelligence and it would not have any police function. An individual rather than a collective responsibility for national intelligence was proposed. Finally, the director of the proposed organization would be responsible directly to the President.

It is interesting to note that Secretary of War Stimson commented on the subject of intelligence coordination in his biography "On Active Service in Peace and War." This quotation reads: "Stimson was insistent that no impatience with its occasional eccentricities should deprive the Army of the profits of cooperation with General Donovan's Office of Strategic Services. Throughout the war the intelligence activities of the United

States Government remained incompletely coordinated, but here again it was necessary to measure the profits of reorganization against its dislocations and on the whole, Stimson felt that the American achievement in this field, measured against the conditions of 1940, was more than satisfactory. A full reorganization belonged to the post war period."

On 18 January 1945, the Joint Strategic Survey Committee reported to the JCS on the subject of a central intelligence organization. The members proposed first a national intelligence authority composed of the Secretaries of State, War, and Navy and the Chief of Staff to the President. There would be an advisory board consisting of the heads of the various intelligence services. The new organization would have the power to inspect the operations of the various departmental intelligence services and would have the responsibility for protecting sources and methods.

At this juncture the press got wind of the discussions for creating a new intelligence organization and, on 9 February 1945, fairly complete details appeared in the Chicago Tribune and the Washington Times Herald. There was considerable furor, and some members of Congress took a dim view of the creation of what they felt might become a peacetime "gestapo."

Shortly after this — just a few days before his death — President Roosevelt asked General Donovan to get together with the heads of the various intelligence and security services and get a consensus of views on a central service. Donovan did this and also went further and queried by letter all of the members of the Cabinet. Within the intelligence community there was general agreement that a central service might be appropriate, but there were several conflicting views as to whether it should report to the Joint Chiefs of Staff, to the Department of State, or to the President, and there was also controversy as to whether there should be individual or collective responsibility for national intelligence. The response from the Cabinet members was varied and ranged from yes to no.

After open hostilities had ceased, as we all vividly remember, there was almost frantic haste to demobilize not only the military services but many of the war agencies. On 20 September 1945 the OSS was disbanded. Its Research and Analysis Branch and its Presentation Unit were transferred to the Department of State, its Secret Intelligence and Special Opera-

tions Units were transferred to the Army, and the former were preserved in the Strategic Services Unit which reported to the Secretary of the Army.

On 22 October 1945 a report prepared by Ferdinand Eberstadt on possible unification of the Army and Navy recommended a central intelligence organization and a national security council. On 14 November 1945 the Secretaries of State, War, and Navy met, discussed the proposed central intelligence organization, and set up an interdepartmental working committee to attempt to arrive at a unanimous recommendation.

The end product of these reports and committees was the issuance on 22 January 1946 of the Executive Order creating the Central Intelligence Group. This Executive Order reflected much of the thinking and work that had gone on during the war. A National Intelligence Authority was created, composed of the Secretaries of State, War, and Navy and the Military Chief of Staff to the President. The Director of the Central Intelligence Group was designated by the President, and personnel were to be assigned from the respective departments as well as recruited from civilian life. The Director of the new Central Intelligence Group was charged by the Executive Order with preparing plans for coordination. The new organization could inspect the activities of departmental intelligence if such inspection were approved by the National Intelligence Authority. It could recommend policies and objectives. It was responsible for correlating, evaluating, and disseminating intelligence and for the performance of services of common concern and such other functions as directed. The Executive Order explicitly stated that the departments would continue to collect, evaluate, correlate, and disseminate departmental intelligence. Finally, an Intelligence Advisory Board, composed of the heads of the service intelligence agencies, was established to advise the Director of the Central Intelligence Group.

With the creation of the Central Intelligence Group there commenced a process of accretion of functions taken from the wartime agencies and from departments which were anticipating reductions in budget under peacetime conditions. The Strategic Services Unit was transferred from the Department of the Army and became the Office of Special Operations — charged with espionage and counterespionage functions. The Washington Document Center was taken over from the Navy

and shortly after that the Army's German Military Documents Center at Fort Holabird joined this unit and together became the Foreign Documents Division. The Foreign Broadcast Information Service, an organization with worldwide bases for monitoring all non-coded radio traffic, which had originally been under the Federal Communications Commission, was transferred from the Army and became the Foreign Broadcast Information Division. During World War II the Army and Navy and OSS and occasionally other agencies had all approached US businesses and institutions in search of foreign intelligence information. An early agreement was reached that this domestic collection should be performed as a service of common concern by Central Intelligence with other agencies participating as they desired, and this became the Contact Division. Another illustration of the type of functions taken on is the division of responsibilities with the Department of State on biographic intelligence. The list would be much too long if we attempted to enumerate all of the functions acquired in this method.

Slightly over a year and a half after the creation of the CIG—on 25 July 1947—the Congress, utilizing most of the features of this Executive Order, passed the National Security Act of 1947 creating the Central Intelligence Agency.

Thus, the mission of the Central Intelligence Agency becomes fairly obvious with the preceding background. The National Security Act of 1947 describes the general mission with emphasis on coordination and on performing services of common concern. It should be clearly noted also that the legislation assigns two roles to the Director of Central Intelligence and the Deputy Director of Central Intelligence — over-all coordination, as well as the role of head(s) of an Agency.

STRATEGIC THINKING AND AIR INTELLIGENCE

Major General James H. Walsh

My purpose in this article is to discuss, in very broad terms, some of the significant aspects of air strategy for the future and the vital functions that intelligence must perform in order to insure the success of future air operations. The suspicions currently entertained that the Soviet *sputnik* may be getting intelligence of both meteorological and cartographic nature required for accurate firing of ICBMs illustrate some of the possible relationships between air power and intelligence. In a rudimentary way, even the first earth satellites point up the tasks and capabilities of future intelligence systems required for survival under conditions of international technological competition — intelligence systems which must meet three basic criteria: global coverage, instantaneous discovery, and absolute accuracy.

I believe that we have a reasonably good understanding of past and present concepts of air warfare and the relation of intelligence to those concepts. It is far more difficult to look into the future and to do so with the precision and clarity needed to prepare ourselves effectively for the trials and dangers ahead.

The reason for this basic uncertainty is not that many people have neglected the problems of aerial technology and its strategic implications. The reason is rather that we are in the midst of a technological revolution. Changes are becoming so rapid, so penetrating and, in many instances, so contradictory that the direct and indirect results of the technological revolution tend to control — and at the same time to confuse — the nature and application of tomorrow's air strategy. Nevertheless, it is in this setting of dynamic technical change and a world beset by what often seems an unlimited number of related and unrelated political, economic, and military problems that we must attempt to examine the future direction of air power.

To begin with, we already have seen major alterations in the basic nature of air forces since World War II. The transition

to jets, nuclear weapons, sonic speeds, countless black boxes, and, to a degree, missiles typifies the changed environment which governs today's air capabilities as compared with those of 1945.

Fifteen years ago the RAF qualitatively was the world's leading air force. Today it is in third place. More important, it is not in a class, by a broad margin, with the air forces of the US and the USSR. It has neither the aircraft, the equipment, the bases, the research and development, nor the funds to become again a truly self-sufficient force, with strategic capabilities as required by world conditions.

Fifteen years ago the Soviet Air Force was an adjunct of the Russian army. Statistically it represented a force in quantity, but it had poor operational know-how and no strategic capability. Its aircraft were fair, at best. Today the Soviet Air Force is the largest in the world. It is equipped with modern weapons, some of them as advanced as those of any other nation. It has a well-funded and aggressive research and development program. Although it still has many weaknesses, the Soviet Air Force is making a bid for world air mastery.

The US Air Force also has come of age in the postwar period. It has held the quality lead for most of that time and still holds it for most of the important equipments. Its personnel are superior in training and efficiency. But the USAF has problems, especially in areas outside the SAC program. Its progress is not to be belittled, but in some areas its progress perhaps has not been so fast or so forward as we would like it to be.

The fortunate aspect is that during the postwar period the USAF has grown to be a global force. In fact, to this date, the USAF — not forgetting its naval support — is the only global force extant. This American capability is a fact of overriding importance. It will remain a controlling factor in the international power equation, to a certain extent, irrespective of technological slippage and of the inevitable acquisition by the Soviet Union of a global missile force.

The most important single change since World War II is that atomic airpower has become the dominant military force. The only way a nation can deliver nuclear firepower over long distances and in a short time is through the air. Sea and ground delivery of nuclear warheads is important, particularly in special situations. But in terms of a global nuclear war, these

systems — and some of the secondary means of aerial delivery — can do no more than furnish local, regional, and tactical support to the strategic air strike forces.

One of the changes upon us deals with defense in nuclear aerial war. Whereas the offense still seems to have outdistanced defense, the old axiom that like weapons are the best defenses against like weapons again could become true.

For the moment there is very little one can do when an atomic explosion occurs except to be underground, fully equipped with food and non-contaminated water or, preferably, plenty of Irish whiskey. Nevertheless, the very possession of nuclear weapons for defensive purposes may act as a "preventing" factor — not because even the best defense would be capable of halting an attack, but because a good defense system would boost the force requirements of the attacker, lower the probability that he can execute his plan with full success, and thus, in some cases at least, tend to induce him to delay his aggression until he has reached the required force and technological levels. It is in the nature of a "race," that the aggressor may be unable to achieve such a posture of superiority that he can dare take the risk of nuclear attack. If this should be a vain hope, for example, because the defender has failed to keep up with the pace of the race, the actual use of nuclear warheads against incoming vehicles should reduce the effectiveness of the offense.

Some of our forward looking scientists are optimistic about the feasibility of employing anti-ICBM missiles, which would take advantage of the greatest point of vulnerability of the early ballistic missile, its fixed trajectory. Many ideas have been proposed about nuclear predetonation and sophisticated employment of modern electronics to interfere with incoming nuclear attack.

There are a number of passive defensive steps which could be taken to lessen the vulnerability of our retaliatory force. These include the dispersal of aircraft and missiles, shelters, and other forms of base hardening, short exposure times, rapid reaction procedures, and maintenance of a substantial portion of the alert force in the air at all times.

Unfortunately such systems can be very costly. They are limited in their coverage and may not be reliable enough for

the safety of personnel and certain equipment. Elaborate passive defenses tend to disrupt and slow the ability of an air force to retaliate as rapidly as required. For these reasons the strategic effectiveness of passive defense is predicated upon effective warning. By warning I refer to technical alarms such as radar and infrared sensing and to interrelated strategic and tactical indications intelligence.

The true effectiveness of defense will be a function of the scope, size, quality, and mental effort put into requisite weapons systems needed to furnish capabilities for protection, warning, interception, and countermeasure tasks. It may be dubious whether or not even the best defensive system pitted against combinations of different types of attack weapons ever will attain a high kill rate, but this may not be the critical point.

Rather, countersystems embodying nuclear warheads and built around effective warning and reaction responses suggest that a nation may be able to close the gap between the power of the offense and present limitations on defense. Such systems could pre-empt the advantage of surprise by sneak attacks by an aggressive nuclear delivery force. They would force the attacker into more elaborate and costly delivery means, primarily large and massive raids which are susceptible to strategic and tactical detection and to interception measures.

Through all these means and measures the offensive may not necessarily be priced out of business, but its effectiveness should be reduced against its primary objective — the opponent's retaliatory force. Thus, it would be hoped, the attacker would be induced *not* to strike because of the uncertainty over the success of his initial blow and also because he would have to risk his main force at excessive loss rates. In nuclear war the first blow must be decisive: the retaliatory force must be killed.

It is quite clear that intelligence influences the effectiveness of defense. Whatever the technical proficiency of a defense system, it can be improved by better intelligence, whereas even the technically most promising defenses can be invalidated through intelligence failure anywhere along the "assembly line" — from scientific intelligence to tactical warning. Perhaps it should be observed that good intelligence would allow the utilization of foreign scientific and technological achievements for the improvement of our own posture. Beyond providing us with better design patterns, such intelligence also would enable us to build our equipment to such specifications as to optimize its capabilities against the enemy's weapons.

I should like to turn now to a discussion of various technological factors, some of them here now and some on the horizon, and try to relate them into a strategic pattern.

During the years ahead we shall be approaching practical terminal limits in certain key parameters of weapons systems. We already may have reached what could be called terminal explosive power, not that it would be impossible to achieve higher yields.

Within the next few decades we probably will attain terminal speeds, at least for terrestrial operations. We cannot exceed certain speeds without being forced from the earth's gravitational field. Before we achieve theoretical terminal velocities we should reach a far lower practical speed limit for operations directed against targets on the ground. We must remember that the attainment of maximum speed in flight may require more time than would be necessary to reach a terrestrial target at lesser speeds.

We certainly shall be capable of terminal ranges in the sense that future air and missile systems will be able to circumnavigate the globe at least once. I am convinced that there will be no practical limits to altitude, although there may be temporary barriers to surmount before manned and powered space flight becomes a reality. Such restrictions could occur in metallurgy, engines, communications, aero medicine, and nuclear components, among other fields.

Let me dwell for a moment on the relationship of altitude to tomorrow's air strategy. In the immediate future, altitude essentially will be a matter of tactical advantage inasmuch as, with respect to powered flight, we still shall be competing in heights measured by thousands of feet. We have come to recognize that the attack force with the higher altitude capability, generally speaking, is the force with the greater penetration capability. To achieve tactical altitude advantage we are moving into speeds up to Mach 3 as a result of improved rocket fuels, higher thrust engines, aerodynamic advances, and even newer black boxes. I am talking about situations up to 100,000 feet.

But today we also stand on the threshhold of entirely new altitude dimensions. Space vehicles already have been climbing to heights of 600 miles, and unpowered satellites, or *sputniks*, are flying around the earth approximately every hour and a half, at heights up to over 1,000 miles. This altitude is by no means a limit but soon will be exceeded. Disregarding the future development of orbital flight, even at this point the significance of the recent quantum jump is that we are acquiring the capability of staying in the air.

This overriding technological fact will have the most profound impact upon military operations. At present altitudes, the airman must worry about hurricanes, fog, winds, and other weather factors characteristic of the dense air which lies just above the earth. Tomorrow's space flyers must be concerned with meteoric showers, cosmic radiation, electronic barriers, and Buck Rogers' conditions within his cabin. Instead of using flight as a means of traveling from one point on the earth's surface to another, either for friendly or unfriendly purposes, the new problem will be to reach an orbit, maintain it, and utilize nonpowered flight for scientific, military, and probably economic purposes.

The flying machine of outer space will not spend 90 percent of its time on the ground, but 100 percent of its time aloft. In simple statistics, we are moving from transonic speeds and periodic flights of several thousands miles in length into an environment where speeds will be of the order of 16,000 knots and "ranges," depending upon the height and shape of the orbit, easily may exceed 1 million miles per day and hundreds of millions of miles per year.

The development of terminal weapons — in terms of explosive power, range, endurance, and speed — will not bring the technological race to an end. Strategies will capitalize on the new dimension of altitude and perhaps endurance rather than distance as a decisive area of military competition. Military superiority will be dependent upon relative advantages in electronics, warning, and deception. Thus the sciences of instrumentation and intelligence will become truly decisive elements in the equation of a strategy in which the chief maneuvers seek to conquer altitude and achieve enduring control from the ground to outer space.

Modern air strategy will be affected by a number of additional problems, each of which could become crucial in varying circumstances. There is, for example, the requirement that a portion of the aerial strength must be on constant readiness status. A strike force that requires one or two days to get ready is a military liability. Even in today's war it would be caught on the surface.

An effective air force must be numerically strong and able to get its combat aircraft into the air in time. It must be located on a large number of bases, preferably distributed on several continents and located at varying distances from the enemy. Moreover, it must be supported by reconnaissance forces operating vigilantly around the clock. Only such an air force is in a position to achieve a strategic, though not necessarily physical, invulnerability.

In former wars, material strength was the decisive factor. The speed with which fire power could be delivered was an important but still a subsidiary element. The nature of a future war is essentially no longer a dispute about territory but a competition for gains in the time dimension. This is because, in the first place, technology is a variable in time. The speed with which this factor varies will continue to increase as long as technological progress continues. In the second place, surprise being a key to success in air and missile warfare, the initial rounds of conflict are little more than a contest to operate faster than the opponent. Surprise attack will be successful if the attacker moves faster than the defender. It will fail if the defender's "reaction time" deprives him of targets and disrupts the attack schedule.

Intelligence must come to closer grips with the time dimension. We are dealing not with one uniform period but with a whole set of different time categories. There is the time problem of maturing manpower, scientific discovery, and technological invention — measured in generations. There is the duration of research and development programs, decisionmaking, production, and incorporation of weapons into battle orders — a period of years to decades. There is the complex problem of warning — ranging all the way from advanced strategic warning measured in weeks, months, or even years, to tactical warning, measured in minutes. There is the problem of reaction time and interception, measured in seconds and microseconds.

Pre-emptive, retaliation, deterrence, counterforce, retardation, and disruption attacks all, in one way or another, are tied to a specific time requirement. The more mobile warfare becomes, the more moving targets are assuming significance, the less it is a question of mere "capability" than of "capability in time." An airplane carrying a high yield weapon can knock out an air base; the problem is to destroy it at a time when the target will be most lucrative — for example, just before the moment when an attack is to be launched from that target. Need I add that only intelligence can provide this all-important "timing capability"?

Perhaps an additional illustration will clarify this thesis further: "Reaction time in guided missiles." It is important to count missiles in terms of numbers, warhead yields, and the like. But the foremost problem is that of reaction time or response.

If it takes a strategic missile force four hours to launch, whereas the opponent can launch within minutes, the obvious advantage belongs to the side with the shorter reaction time — provided it has adequate warning. The 4-hour reacting force will never leave the ground; its threat will be pre-empted. If this is correct, it appears to be a mistake for intelligence to count the degree of deterrent power primarily in numbers of missiles or warhead yields. It will be necessary to assess, above all, relative times of reaction.

Earlier we discussed the new parameters of altitude. It is appropriate, I believe, that we reflect on the purpose of operating at such altitudes. The use of outer space will permit almost continuous observation of any point on the earth, a situation which, although not entirely without precedent, marks a new departure in modern strategic warfare. Space platforms are becoming indispensable elements of effective warning systems against future means of weapons delivery. Unless we conquer space, a great deal of the scientific knowledge which we require to remain in the technological race will not be available.

Furthermore, orbiting vehicles eventually will be used as weapon carriers and thus will develop into crucial components of offensive and defensive missile warfare.

All this poses the spectre of outer space military conflict which will involve three phases: first, the competition to get

vehicles into space in sufficient quantities to occupy desirable orbits and to make profitable scientific use of orbital flights; second, the development of military techniques for operating from our own orbits and for countering the enemy's militarily significant orbital activities; and third, the ability to neutralize or destroy terrestrial and aerial components of orbital systems.

This new sphere of warfare raises some perplexing problems in world relations. In addition to traditional surface boundaries, there will arise sovereignties over vacuous orbits and the areas beneath them—a system of interlaced surface and spatial boundaries thousands of miles in depth and tens of thousands of miles in length.

A new pattern of international relations must be developed in which orbits are occupied peacefully or conquered and in which orbits must be delineated. During peacetime the nations must respect each other's scientific and security operations in the orbits, and in wartime, of course, the purpose will be to eliminate all of the opponent's space vehicles. In turn, there must be capabilities for protecting the satellites. It is clear that this involves entirely new types of "aerial" operations, as it is also clear that the diplomats and international lawyers will have to do some hard thinking to settle peacefully the problems of orbit allocation and orbit sovereignty.

The introduction of the orbital dimension into warfare signifies that factors such as Iron Curtains, the dispersal of air bases and missile sites, and the ability of navies to "hide," so to speak, in the vastness of the oceans will tend to lose significance. The nature of the new implements is definitive enough to suggest that the use of truly underground and of undersea facilities may dominate the terrestrial scene. As a result, the roles and techniques of surprise will undergo very profound changes, the exact nature of which we cannot predict.

For a nation to exist and survive under these conditions, its intelligence system must become a predominant security technique. Such a system must meet three criteria: global coverage, instantaneous discovery, and absolute accuracy. The system must be fully operational both in war *and* peace. Intelligence must be run not only for the benefit of, but *by* those who are responsible for decisions of life or death.

I believe I have reached the point where it is necessary to examine this strategic framework with its epochal implications

in the practical light of where we are today and to consider the future directions we must take.

The problems of strategic and technological surprise are becoming increasingly serious. The danger of tactical surprise is not lessened when the enemy, in addition to a high altitude and rapid strike capability, also has a capability for low altitude air attack and may be developing mixed high and low altitude offensive forces.

Taking an even broader view, we can say that the nuclear explosive and the supersonic delivery vehicle have appeared at a moment when society is quite defenseless against such weapons. During the last few centuries, war has taken place at the margins of society. Society supported the war from its production surpluses and remained intact as a going concern despite losses and devastations.

You recall that during ancient times, the situation was different. During the Middle Ages, every town had to be self-sufficient for defense, with walls, moats, shelters, food, and water reserves. Practically every citizen had to bear arms. The American frontier town serves as a more recent example of this dangerous way of life.

I believe that society eventually will adjust itself to the modern technology of destruction. Perhaps we may have to become troglodytes; our ancestors were. Architects may develop new types of resistant houses and "safe" urban settlements. Perhaps we shall develop anti-radiation protection. The principle of "hardening" can be applied to many human needs.

I am predicting only that the human mind will not stop inventing. After it realizes the grim threat of modern weapons, society gradually but inevitably will take measures to assure its survival. I am basing this prediction on my faith that modern man, morally and intellectually, is not inferior to previous generations of 700 and 2500 years ago.

Whether this process of social adjustment is going to last 20 or perhaps 50 years I am unable to say. But during this interim phase, humanity well may be passing through the greatest peril of its existence. A war five years from now probably will be immeasurably more destructive than a war around 2000 A. D. Our security, therefore, must be tailored to get us and the Free World safely through this immediate period of extreme hazard.

It is this interim character of the present military situation which confronts us with many perplexing problems. Defense planning, which includes intelligence, is faced with numerous paradoxes.

In this age of maximum offensive strength, there may be a great deal of reluctance to use up-to-date weapons, simply because no one wants to unleash a nuclear war. Yet we must prepare ourselves for a contest which requires us to put the bulk of our resources into nuclear armaments. As a result, we may have only limited capabilities to wage war in which nuclear weapons do not provide the basic fire power.

Yet some people have gone so far as to advocate the retention of full-fledged non-nuclear forces in addition to atomic forces. It is generally agreed that we should prepare ourselves to fight with nuclear weapons. Yet some contend that we also should retain a capability to fight in the style of World War II — high explosives on the ground, at sea, and even from the air.

We probably could agree that the availability of non-nuclear forces would be very advantageous. Several types of non-nuclear explosives will remain with us, even in the nuclear age. Under certain tactical conditions, those may be even more effective than nuclear materials, which is the main reason why they should be retained.

Unfortunately, the question is not one of advantage or disadvantage, or even of choice. The question is one of capability in all aspects — manpower, military organization, research, funds, training, equipment, tactics, and so on.

Suppose that we maintain both a nuclear and a non-nuclear defense establishment. There is the high probability or near-certainty that the investment in non-nuclear arms would be invalidated as soon as the first atomic weapons are used. This will happen, almost inevitably, at the first serious military setback of either belligerent.

But the question of non-nuclear armaments is not just a matter of duplication. The cost of matching atomic systems with non-nuclear weapons in terms of relative military effectiveness would be exorbitant. More significant, such a second force could not be established on any reasonable scale unless we acquire two sets of our national resources, two sets of our qualified manpower, and two sets of our country.

I am not raising the issue of limited versus general war. The requirements of any local war situation can be met from available and programmed forces and resources.

Rather, I am addressing myself to the problem of attempting to build a non-nuclear force at the expense of our atomic strike and defense units, which must be maintained at an increasing degree of readiness because of the overwhelming priority of the Soviet nuclear threat to the US and the Free World. We cannot turn back. There may be a collapse of nuclear courage, but no longer can there be any doubt that we have crossed the nuclear Rubicon.

A similar paradox confronts us in disarmament. If the danger of attack could be eliminated by reductions of force levels and by the outlawing of particular types of weapons, the security of all nations unquestionably would be enhanced. The trouble is that with the power of modern weapons, even minor infractions to disarmament agreements may prove fatal.

After 1919, the Western Powers tried to control German armaments. But practically every week a German arms violation of the Versailles Treaty was reported. Many work shops repeatedly were discovered in which, it was said, machine guns were being produced under the guise of baby carriages.

Nevertheless, the security of the Western Powers did not seem vitally threatened, despite the fact that the Germans maintained secret arsenals and continued surreptitiously to produce weapons which they were not supposed to have. These weapons did not seem powerful enough to pose a real threat to Western security. Neither were the camouflaged divisions which the Germans maintained secretly.

But in our time a nation which produces perhaps as few as 50, or as many as several hundred high-yield weapons could become a real threat to the peace, even with makeshift delivery vehicles, especially if other nations faithfully adhere to their disarmament agreements. You are well aware of ominous infractions to such agreements in North Korea.

The point is that we cannot go back in history and undo the discoveries of nuclear fission, electronics, and aviation. We have to live in the modern world. Technological progress will tend to "break through" even the most elaborate and sophisticated disarmament "controls." Each breakthrough will necessitate renegotiation of agreements. There will be little, if any, stability and durability, let alone guarantee of assured international safety in such arrangements.

I confess that this is a very dismal picture. It will not be changed by expectations that the human race will become peaceful and angelic in the next 20 years. There are two brutal facts which we have to remember. The first is that the Soviet regime still is around. Although it sometimes seems to be showing signs of middle or even old age, there is no new evidence that proves that Kipling was wrong when he wrote: "Make ye no peace with Adanizod, the Bear who walks like a man."

The Soviets have not changed their basic objectives. Their policies have remained constant in areas that count, including their fantastic military preparedness effort. It is clear that the Soviets do not expect that the millennium of peace has dawned. While they prepare for war we cannot turn our backs. When they talk conflict, we cannot risk to ignore the peril. When they arm themselves with the most modern weapons, we cannot reduce the magnitude of the threat by wishful thinking about their supposed inability to do that which manifestly they are doing.

We can philosophize that the Soviet Union will enter into an evolution which, after some time, will transform the present Bolsheviks into Jeffersonian Democrats or Puritan pacifists. I do not believe that anyone who has studied Russian and other revolutionary history seriously expects such a mutation will take place.

Naturally, I do not postulate eternity for the Soviet system: their time will come. The question is, when? So far, reports about their demise usually proved quite "exaggerated." Their resilience has been extraordinary. Distinguishing our hopes from realistic planning assumptions, we would be foolhardy not to give them an additional life expectancy of one or two decades. We *must* assume that they will remain in power during the entire period when the technological challenge to the US will be at a maximum.

It is not certain, of course, that the Soviets deliberately will launch an attack on the US. But at the same time we cannot be sure they will not. In the same vein, there is no doubt but that the social system of Russia is changing in many ways.

But is this necessarily a favorable development? One danger surely is that if the Soviet dictatorship were liquidated by force or otherwise, this event — which only optimists expect at this time — could precipitate a major internal crisis. Such a crisis would be uncontrollable. This means that it could lead very easily to a world conflagration. There just is no way by which we could conjure away the ominous dangers in our future.

This leads me to the second point of pessimism about peace in the foreseeable future. It is a mistake to consider the Bolsheviks as the only cause of conflict. Wherever we look at the continents today, there is plenty of politically combustionable material. Old political structures are breaking down. New nations are emerging. Most of them have their own imperialistic ambitions, and some of the older nations show frightening signs of decay. Economic difficulties, cultural transformations, intellectual crises, and ideological passions acerbate many of these political changes, not to mention inflammatory propaganda campaigns, political warfare, and the like.

Unfortunately many of the political minds still function as though we were living in the time of gun powder and sea power. Few have grasped the significance of the modern technology. There is a dangerous timelag between political thinking and technological reality. As industrial technology advances, psychological stability weakens. We must admit the possibility that world society will grow sicker and ever more unstable, even as the descendants of Icarus reach out for the moon.

It is unjustified, therefore, to expect that all nations will observe restraint in order to avoid nuclear conflict. Perhaps most nations will, but the odds are that there will be a few who will act irresponsibly. Hitler was not the last specimen of his type.

Recent sociological research asserts that a large percentage of political rulers and regimes have been, historically speaking, criminal in motivation and action. There is no doubt that many rulers, especially those who acquired unlimited powers, may have been, at least partly, insane. In fact, a German historian coined the term "Caesarian insanity" in order to describe the actions of many Roman emperors.

Although we have made some political progress, the world nevertheless has had more than its share of insane, criminal,

and power-hungry rulers during the 20th century. Crime and insanity rates tend to rise as industrial civilization advances. It may be very convincing to us to say that because of the existence of hydrogen weapons the power-seekers should mend their ways. This type of argument remains unconvincing to the evil doer who is willing to accept the risk, regardless of the consequences.

There is only one way to reduce the probability of criminal aggressiveness. That is, to remain militarily overpowering and mentally more vigilant than the would-be aggressor — to outsmart and outarm him at every turn and to apply persuasive techniques to protect him — and us — from making a miscalculation. It is not enough to possess what could be called a "statistical posture of deterrence." The aggressor also must be convinced that it is inadvisable for him to break the peace. But do we master the techniques by which we could have such an impact on the opponent's mind?

We are in the midst of a lasting crisis which Mao Tse-tung has described as "protracted conflict." Political and psychological weapons are being used every day to advance the Communist cause. In modern conflict, even though actual shooting may not be taking place, air power and the threat of almost instantaneous massive destruction have become the key elements of the psychological as well as the physical struggle.

The extent to which we can deter the opponent from attacking us determines our freedom of action on many of the world's battlefields. If the level of our ready deterrent strength is too low to provide the assurance that the enemy will not react with an all-out attack, we could be inhibited in executing proper defense actions in subsidiary theaters.

Deterrence is a necessary condition for the maintenance of peace — and the waging of limited war — but it cannot be a static condition if it is to keep that peace. If any nation acquires a more effective weapons system, the best posture of deterrence existing before the technological mutation is subject to rapid nullification. We live in a world where the threats to tomorrow's peace are developing today in the laboratories and on the drawing boards.

It is true that so long as the two main competitors run neck to neck, even a major advantage in one or more technological fields may not necessarily upset the balance. A state of mu-

tual deterrence may be reached which essentially would mean that a world conflagration could occur against the deliberate planning of both the US and the Soviet Union. Hence I do not believe that the Soviets merely are trying to catch up in the technological race. On the contrary, they seem to have organized themselves to win the technological race on a broad front, not only in many significant scientific areas but also in combat operational strengths as distinguished from mockups and prototypes. In other words, they may be trying to surpass us simultaneously by at least one whole and perhaps two weapons generations.

The technological race is the very essence of protracted conflict. It is the main event which we cannot afford to lose. The essence of this conflict is not, as many of our contemporaries believe, a series of limited wars in the jungle and in the desert. Any American intervention into limited war depends crucially upon our relative technological posture. If we lose the technological race we cannot fight on local and regional fronts. Nor will an increase in our capability to fight in Bali or Timbuctu improve our over-all deterrence. It certainly is not likely that, should the US fall behind in technological capability, the Russians will press their advantage merely to get a few fringe benefits. The struggle between Rome and Carthage is more meaningful to our times than the formalized and restrained war-tournaments of some epochs in the history of Christian Europe.

Technological superiority in means of delivery is the essence of success in nuclear war. The idea that nuclear war will take the form of an exchange of mutual blows perhaps forecasts correctly what is going to happen. However, this is not necessarily a concept on which the military planner should work. The purpose of planning for nuclear war is to achieve such a predominance of strength that a nuclear blow can be delivered, without the undue risk that a deadly retaliatory blow will be returned. Even the Soviet military leaders who, during the Stalinist period, belittled the importance of military surprise now appear to recognize that surprise could be the condition of nuclear success.

The acquisition and maintenance of a dynamic capability to deliver a rapid and devastating blow — plus a proportionately dynamic defense — are prerequisites to survival. The nation

which insures that its retaliatory force is, in fact, effective at all times, is obtaining maximum protection against preventive and pre-emptive attacks. The success of preventive war and pre-emptive nuclear launchings depends upon the achievement of triple or quadruple surprise — technological, tactical, timing, and conceivably strategic. The US can keep its retaliatory guard up only if it is able to render those surprises too costly, too impractical, and too uncertain. Thus surprise attack will be too risky for enemy resort only if the US keeps ahead in technology and intelligence, as well as in its force levels and, above all, in reaction times.

Should we lose tempo and should one or more of these four pillars of our security crumble, the enemy's superiority may become such that he need not use nuclear weapons except as a threat. The so-called ultimate threat of large hydrogen weapons could become "demilitarized" — by manipulated fear. Suppose the aggressor says: "I grant that you can retaliate, but you will be completely devastated through my first blows. We leave it to you whether or not you want to elect your own death. If you retaliate, you will die, at best with the comforting thought that you have killed some of us. Or you may survive under our whip. That is your alternative." It is known that the Soviets are doing considerable research on conditioned reflexes and brain-washing techniques. Manipulated fear and the conditioning of the opponents' mental and psychological reactions are strategic concomitants to nuclear weapons. The Soviets don't overlook a bet.

Previous wars have lasted for years. Ever since the emergence of a modern industrial society with its long mobilization requirements, war could not be short. A future war may be decided within a matter of a few hours. I think it is wrong, however, to place all attention on the destructive phase of this type of conflict.

In previous times, the length of the war allowed us to remedy the shortcomings and omissions of peace. Today and tomorrow, once the climax of the conflict has come, we shall be the prisoners of our previous decisions. In that critical phase we shall not be able to increase our force levels, acquire a new set of technological weapons, adjust our tactics to outdo those of the enemy, or even reassure the fearful and give orders to the panicky.

The protracted conflict may last longer than any previous war. Although the climactic or decision phase of this conflict may be short, still, the conflict could endure for many decades. We are in the battle now. As a consequence, the main battles are being fought by military forces in continued readiness, by warning and intelligence services, by the research and development community, by national and industrial planners, and by budget makers, as well as by moral and intellectual attitudes.

Militarily speaking, the decisive phase could be won or lost by the staff and operational officers who 5 to 10 years before the shooting select or reject certain weapons systems, succeed or fail in shortening lead times, organize offensive and defensive forces, determine the balance between force elements, and plan deployment and reaction times. It also may be won or lost by the executive and congressional branches which decide, with a timelag of 2 to 3 years, the force levels to be maintained in any technological phase; by the weapons requirement, procurement, and logistics planners within the military; and by industry, all of whom, together, have the task of developing and producing superior weapons faster and in larger quantity than the enemy; finally, by intelligence officers who must try to forecast the relative strengths and weaknesses of the strategic equation 5 to 10 years ahead. The latter will succeed — or fail — depending on whether or not they convince the powers-that-be that their best estimates are valid.

In protracted conflict, the climactic phase may be war in its most extreme form. If the climax is a matter merely of threat and surrender, it will be the most "peaceful" of all wars. To intelligence its most significant aspect should be that protracted conflict is a war during peace.

It is easy to enumerate the need to win the technological race, the requirements for adequate numbers of weapons and forces, the advantage of hardened and dispersed base locations, the necessity for fast reaction times, and so forth. But the basic reason these requirements are difficult to satisfy is that no nation has the economic capability to live up to the exigencies of protracted conflict in the early period of the nuclear age.

I am not talking about budgets which can be increased and reduced. I do not mean various degrees of economic mobilization and readiness. Rather, I refer to more fundamental limitations.

To win the technological race a nation needs numerical and qualitative superiority in technicians and inventive geniuses. Unless the most revolutionary educational changes are made, it is unlikely that sufficient scientists and technicians will be produced to satisfy the growing needs of increasingly complex military programs. Even a program which marshaled all educational resources into scientific and technical curricula probably would be inadequate for acquiring that degree of technical superiority and material effort which makes the launching of a nuclear attack or the psychological threat of such an attack a relatively riskless affair.

The cost of weapons systems is rising geometrically, while the increase in productive capabilities proceeds much slower. There is the problem of protecting and rebuilding our cities and facilities to survive in a nuclear environment. This is a problem — so far largely untouched — which clearly accentuates the severe limitations on our economic capabilities to meet the challenge of the nuclear age. In this time of economic plenty, scarcity still is the supreme fact of civilian and, above all, military economics.

Material resources are not the only limiting factor. Time, which is a major resource, also is in short supply. For example, the time needed to transform a blueprint into a modern weapons system has become such that a military force never possesses an active arsenal without at least some obsolescence. I mean obsolescent in the sense that certain tasks simply cannot be accomplished against opposition or must be undertaken at excessive risks and costs.

There is one inescapable conclusion from this discrepancy between requirement and capability. It is this: the future strategist has the potential choice of an entire technological spectrum of weapons. At least several weapons systems will be able to do the same task.

Because of the technological potential available to both sides, he will have to decide whether to select a faster or slower weapon, an explosive with greater or lower yield, a weapon of endurance or of stealth. Should he guard against high or low level attack? Should he dispense with manned bombers in favor of missiles? Should he select an earth satellite "anchored" approximately 21,000 miles above its target to de-

liver nuclear firepower — or should he use a submarine from which to launch a missile?

In practical terms the strategist can select only a limited number of systems from this entire technical spectrum, which will grow as we progress further into the scientific era. Strategists on the other side have to make similar eliminations. The chances are that the choices may not be identical because of different strategic objectives, production capabilities, operational doctrines, concepts of defensive warfare, and so forth. In turn, because the choices probably will be different on both sides, the possibility of surprise and other major military initiatives will increase.

Therefore, intelligence must forecast, in ample time and correctly, the enemy selection so that proper defenses can be designed. Of course, the choice of the enemy may impose the need for counterweapons, which may have a feedback against our original weapons choice.

It is necessary to insure that the relationship between what we actually have and what we require to counter the enemy's principal threats is such that we are not accepting undue risks. If we made a poor or overly narrow selection from the spectrum, if intelligence fails to guide the research and development community concerning the enemy's probable selections, we might invite attack, provide inadequate defense, and jeopardize life and liberty. But if our intelligence is keen and our armament effort generous we might ensure peace for the period of the technological cycle.

We are in a conflict which has and undoubtedly will endure for decades but which at present is changing complexion. General J. F. C. Fuller coined the term "machine warfare" to describe World Wars I and II. This expression no longer fully applies to future "technological warfare."

I am afraid that the Communists have shown a rather sophisticated understanding of the strategic problems involved in this new form of technological struggle. They seem to understand interrelations between social conflicts and technical and economic competition. More than that, they are organizing themselves to achieve an overwhelming strategic posture in the technological realm. They are girding to win the technological race against the US. Whatever the disadvantages of a dictatorial system, their regime responds to rapid decisionmaking.

In this area, we do not seem to have matched their strategic comprehension. We are said to have made the decision never to strike the first blow. At the same time we have neglected to introduce sufficiently into our thinking the fact that if the opponent is allowed opportunity to achieve a broad tactical success through an initial blow, the retaliatory strategy must be more costly and complicated in order to compensate for the risk and loss which could occur at the outset and weaken the retaliatory force before it goes into battle.

Under the postulate that the enemy strikes first, defense must be more expensive than under the postulate that we shall not surrender the initiative. It follows that we must not be reluctant to pay the price of our security against an opponent to whom we present the gift of the deliberate surprise attack.

The technological race has engulfed us exactly as a fast flowing river occasionally catches the unsuspecting oarsman. Such a situation cannot be met and overcome by preaching to the river, by throwing away the oars, or by using only one of two hands. In such a situation, all skills and all strengths are needed to ride out the rapids and not get smashed against the rocks.

The fundamental conclusion I want to leave is that the technological race, because of various economic limitations and political climates, may not be won by any super power engaging in the competition, even with all its strengths. But this race very well may be lost by a country which fails to put its continued best efforts into the challenge.

It is to a large extent the duty of the national intelligence community to explain to our nation's leadership the true nature of this strategic problem. I pray that we will not fail in this task which is indispensable not only to our survival but to the survival of civilization.

Intelligence has been getting the facts about the Soviet Bloc, or at least enough of them to enable many right decisions to be made. But we have not been able, often enough, to get our information and evaluations accepted and acted upon. The somber fact is that as professional intelligence people we have not entirely grasped the meaning of protracted conflict in the nuclear missile age.

I believe it not unfair to state also that as professional intelligence people we have been disappointingly slow in under-

standing the nature of the pressing problems which are confronting us. Only too often our categories of analysis and estimates still reflect the strategic realities of a passing age. We know all about the deposits of even the least important raw materials, but we may miss major scientific discoveries. Our battle orders of the infantry are considerably better than those of earth satellites. We are adept in measuring floorspace, but we are rarely engaged in comparing lead times. We are able to refine our calculations of weapons yields to the first decimal, but the analysts worrying about Soviet neuropsychology have yet to break through to the national estimates. We produce mountains of "data," but our progress in data handling paraphrases Lenin's title, "one step forward, two steps backward." We are considerably better in post mortems than in warning. Our understanding of man's greatest resource, time, has remained fuzzy in most areas.

All in all, although we often express our conviction as to how important intelligence is to national security, we ourselves have not quite realized the crucial position we are occupying in the present power struggle. It is really the effectiveness of intelligence which, together with the effectiveness of our scientists, is the basis of technology. Beyond the development phase, intelligence is either a multiplier or a divisor of military strength-in-being. It is the one "weapons system" which by necessity is in constant touch with the enemy, regardless of whether there is war or peace. And in war, of course, intelligence remains a key condition of success.

But we must elevate our sights beyond the old saw of intelligence being the "first line of defense." Intelligence is the factor which should make defense economically practical, technologically superior, and strategically victorious. In the missile age, intelligence literally will merge with the decisive weapons system, lest the missiles be entirely ineffective.

But intelligence will not be able to do this job unless it comes of age as a technological system in its own right. We must get the equipment our ubiquitous, instantaneous, and encyclopedic mission requires. We must have the forces to operate these tools. We must develop utilization techniques which are at par with or better than those equipments. And we must be able rapidly to feed our information to all users.

One feature will remain unchanged: the ability to think. Electric computers and space telescopes are no substitutes for common sense and judgment. Reasoning by false analogy, preoccupation with minor problems to the detriment of major issues, emphasis on decimals and disregard for the large magnitude, wrong philosophies about the rules of evidence, delusionary procedures such as the piling of estimates upon estimates — not to mention normal human failings such as prejudices, wishful thinking, parochial interest arguments, and subversion — all those will remain possible in the era of technological warfare. The machines, even the electrons, are no better than the brains they are designed to serve. It is gratifying to think that when the machine proves to be inadequate — for example, because it may take three months to "program" it — common sense and "conventional thinking" still will be called upon to take its place.

The plain fact is that the machine, however good, will not replace the analyst. The machine will make the human brain a more powerful tool — this is the main reason we need it in intelligence. Intelligence technology is indispensable for the rapid handling of thousands of data and for the reduction of innumerable variables to manageable factors. This technology is the key to speed, coverage, and accuracy; to computation; and to experimentation with, and testing of, our conclusions and estimates (for example, through "gaining" techniques).

But intuition and insight are necessary to make the machines work. In turn, intelligence technology will make its greatest contribution if it allows deeper insights and ever more creative intuitions. Man has remained the key factor in technological warfare, as he was the key to victory when rocks and clubs were the most powerful weapons. Military, or in a broader sense, conflict intelligence will be at its best when it is based on brain intelligence: IQ's plus wisdom.

Pending the dawn of the technological age in intelligence, we should face up more courageously to the facts of life, however bitter.

As a nation and as the core of the Free World alliance, we have been underrating the danger for more than twelve years. Why was intelligence not more reliable? Why did we fail to see the obvious? Our own thought patterns and our intel-

lectual isolationism have proved to be far more dangerous enemies to our security than the Iron Curtain and the ominous developments behind it.

CONCEPTS FOR A PHILOSOPHY OF AIR INTELLIGENCE

Lewis R. Long

I should like to set forth certain concepts for air intelligence that I feel would vitalize an air intelligence philosophy and could lead to an air intelligence policy and doctrine consistent with the dominant role that air power must play in the years to come. I make no claim of originality in all these concepts; nor do I consider that they alone would form a sound air intelligence doctrine. However, together with the valid concepts contained in the doctrinal manuals, they would, I am convinced, provide better guidance to the field than has heretofore been available.

I should like to emphasize that all the concepts presented are meant to be applied within the framework of one overriding concept for a philosophy of air intelligence — that air intelligence is geared to air power in a nuclear age and that it has the same predominant characteristics as has the air force — range, speed, mobility, flexibility, and penetrative ability.

Because air forces have the capability of flying to any point on the globe and returning to any desired location, air intelligence must provide basic information to guide such flights in peace or in war. Because air forces exert a dynamic impact on all forms of international relations, air intelligence must be prepared to expose for the scrutiny of air commanders the entire structure of other nations and to advise and assist in the determination of air strategy and policies.

In the established principles for the successful employment of air forces it is considered that the air forces are an entity. Even so, air intelligence must be considered indivisible and responsive at all levels of operation to employment as a single aggregate instrument. Air intelligence must be employed for the attainment of a common objective, which — in essence — is to contribute to the security of the nation. Air intelligence provides the key to proper employment of the air forces in exercising the initiative in many different conditions of international relations, in taking advantage of different opportunities

as they occur, and also in creating opportunities in which benefits to the US may accrue by the utilization of air forces in peace or in war. Air intelligence must also guide the air force in exploiting the principle of surprise, in order to attain both military and psychological advantages through speed, deception, audacity, originality, and concentration. For the present, air intelligence must concentrate on indications of imminence of hostilities, without neglecting information on capabilities and vulnerabilities of potential enemy countries. This concentration of effort not only will contribute to the security of our forces but also will provide guidance for combat operations if war is forced upon us. Finally, air intelligence must be carefully coordinated through proper control.

CONCEPT NUMBER ONE. *Intelligence agencies are never more at war than in periods of nominal peace.* The logical outgrowth of this concept is, of course, the fact that the success of the initial phases of war (and in this thermonuclear age these probably will also constitute the decisive phases) will depend on the quality of intelligence produced in peace. Most people can understand and pay lip service, at least, to the latter idea, but they balk completely at a rational consideration of the first one when it comes to providing tangible support needed by the intelligence structure. I have never, in peacetime, seen an intelligence staff at any echelon that was not undermanned, overworked, and restricted in its operations by a lack of real appreciation on the part of the command for the goals the intelligence section had set for itself to accomplish in the light of the command mission.

At all echelons intelligence staffs must have adequate numbers of the best qualified personnel, maximum equipment, facilities, and funds; maximum freedom of action; and coequal status with other major staff elements. It can be categorically stated that if the air force intelligence structure had all the support it could profitably employ — and fully justify — in peacetime, its resources would be ample for any type of war we might become involved in.

Let us now analyse each of the requirements (personnel, material support, freedom of action, and coequal status) in terms of what other writers have had to say, bearing in mind these three basic intelligence missions: to provide timely warning of the imminence of hostilities (whether on a total or limited war basis); to provide detailed knowledge of the capabilities and vulnerabilities of potential enemy nations and of friendly and neutral nations; and to provide the best possible intelligence as to the intentions of foreign nations, particularly those that are our potential enemies.

PERSONNEL. During wartime, all the services drew heavily on civilian professions for manning intelligence posts. Lawyers, insurance adjustors, investigators, police enforcement officers, scientific and technical personnel, and teachers were put into uniform; and, by and large, these people carried the intelligence workload of the services. By and large, too, their contributions compared favorably with those of professional military people. There have been numerous attempts made to identify the qualifications for intelligence personnel. Farago [1] lists ten major groups of traits which "the good spy is supposed to possess" in order to qualify for that particular aspect of intelligence work. For the most part, these same traits could be used as a starting basis for selection of personnel for other intelligence tasks.

> First of all, his morale must be high and he must be genuinely interested in the job ahead.
>
> Second, he must be energetic, zealous, and enterprising.
>
> Third, he must be resourceful, a quick and practical thinker. He must have good judgment and know how to deal with things, people, and ideas. He must be proficient in some occupational skill.
>
> Fourth, he must be emotionally stable, capable of great endurance under stress. He must be calm and quiet, tolerant and healthy.
>
> Fifth, he must have the ability to get along with other people, to work as a member of a team, to understand the foibles of others while being reasonably free of the same foibles himself.
>
> Sixth, he must know how to inspire collaboration, to organize, administer and lead others. He must be willing to accept responsibility.

[1] Farago, Ladislas, *War of Wits* (NY, Funk & Wagnalls Co., 1954), p 187.

Seventh, he must be discreet, have a passion for anonymity and know how to keep his mouth shut and preserve a secret.

Eighth, he must be able to bluff and mislead, but only when bluffing and misleading become necessary.

Ninth, he must be agile, rugged, and daring.

Tenth, he must have the ability to observe everything, to memorize details accurately. He must be able to report on his observations lucidly, to evaluate his observations and relate them to the greater complex of things.

MATERIAL SUPPORT. I should like to stress the importance of allocating the maximum in equipment, facilities, and funds to intelligence work in time of peace with a quotation from Sun Tzu,[2] the Chinese military oracle, whose writings on the art of war in 500 B. C. have influenced military thinking down to this day.

Hostile armies may face each other for years, striving for victory which is decided in a single day. This being so, to remain in ignorance of the enemy's condition simply because one grudges the outlay of a hundred ounces of silver in honors and emoluments is the height of inhumanity.

One who acts thus is no leader of men, no present help to his sovereign, no master of victory.

Thus, what enables the wise sovereign and the good general to strike and conquer, and achieve things beyond the reach of ordinary men, is foreknowledge.

In speaking of the cost of the British secret service as a whole (both positive and counterintelligence), Seth noted: [3]

In 1913 the Secret Services cost 46,000 pounds; in 1939, 500,000 pounds; during the recent war 52,000,000 pounds annually; and in 1953, 5,000,000 pounds. . . . It is worth many times this amount, for though the American, French and Russian (secret) services

[2] Sun Tzu Wu, *The Art of War* (Translation by Lionel Giles, Introduction and notes by B/G Thomas R. Phillips, Harrisburg, Pa., The Military Service Publishing Co., 1944).

[3] Ronald Seth, *Spies at Work*, London: Peter Own Limited MCMLII, p. 202.

are now more extensive than at any time in this century, British secret service still maintains its lead in performance and results.

Farago gives a somewhat different order of magnitude for British expenditures for intelligence. He said that the 1954 budget was three million pounds and that this amount was the highest in the entire history of the British Secret Service. He pointed out, however, that this figure is deceptive because it represents only allotments from public funds and he adds: "The bulk of Britain's intelligence revenue comes from private funds, such as dividends of the Anglo-Iranian Oil Company, some of whose shares are held by the Admiralty." [4]

Farago then gave an indication of what US military services are spending for intelligence. In fiscal year 1955, the Army asked for $54,454,000 for intelligence, and for fiscal years 1952–54, inclusive, the Army spent a total of $176,400,000 on intelligence. Yet this represented less than one-half of one percent of the total Army budget.[5] Then, stressing his thesis that the cold war is a "War of Wits," Farago pointed out relative expenditures for intelligence in the Continental Army and in the services today: [6]

Between 1776 and 1781, George Washington spent approximately eleven percent of his entire military budget on intelligence operations. The fact that today we spend less than one percent of our peacetime military budget on these same activities shows how little effort is being made to solve the "friction" by intellectual means rather than brute force.

From the contacts I have had with various British intelligence officers, visits to JIB (Joint Intelligence Bureau) and some of the intelligence officers of the Air ministry, and from comparing the results of British intelligence with those of USAF intelligence, I am certainly inclined to agree, at least partially, with Seth's last statement for the quality of British intelligence production is invariably very high, and the quantity compares favorably with that produced by the much larger USAF intelligence staffs. The British traditionally have been willing to

[4] Farago, *op. cit.*, p. 50.

[5] *Ibid.*, p. 51.

[6] *Ibid.*, p. 345.

spend a great amount of money, time, and effort in the collection of intelligence information, more, perhaps, than most modern nations. They have not, in other words, weighed results obtained by intelligence efforts on a completely pragmatic basis, as we "practical Americans" are inclined to do; they know that one cannot package intelligence results on a "pound-for-pound" basis. So for the past two hundred years they have been preeminent in the field. This is not to say that they have not made serious mistakes; but, by and large, their intelligence estimates have been remarkably sound. Moreover, they have used periods of nominal peace to extend and consolidate their intelligence activities, not only for the purpose of preparing for the next war but also (what is even more important) preparing for the peace to follow.

FREEDOM OF ACTION. As background for a discussion of the need for granting maximum freedom of action to air force intelligence, I should like to quote the following passage from the Report of the Task Force on Intelligence Activities: [7]

> Effect of Diplomacy on the Over-All Collection of Intelligence.
>
> The task force has recognized the incompatibility in method between the practice of diplomacy and the more direct and active operations incident to the collection of intelligence and the conduct of cold war. While all contribute to the end in view, conflicts between them must be resolved, usually on a high level, and always in the national interest. It must be realized that diplomacy is not an end in itself; that while political ends must be served and unjustifiable risks avoided, the collection of intelligence is a vital element in the fight to preserve our national welfare and existence. Instances have come to the attention of the task force where too conservative an attitude has prevailed, often to the detriment of vigorous and timely action in the field.

Although the foregoing comment was made in connection with a discussion of the intelligence activities of the Depart-

[7] *Intelligence Activities*, A Report to the Congress, by the Commission on Organization of the Executive Branch of the Government, June 1955, pp. 42–43. (Hereafter referred to as "Task Force Report.")

ment of State, it is every bit as applicable to air intelligence as to the Department of State because the air attaché system, which is a major contributor of intelligence information, functions as an integral part of the State Department's Foreign Service.

It is altogether appropriate that, generally speaking, diplomatic considerations take precedence over the collection requirements of the attachés. Nevertheless, within the framework of that principle (which is a part of the principle of civilian control over the military establishment), it should be obvious from the implications of the Task Force findings that a less conservative attitude toward opportunities for collection of intelligence information should permeate not only the diplomatic service but also the military establishment.

I shall not devote much attention to detailed suggestions for carrying out intelligence operations. My concern is with the promotion of principles that would provide the type of climate in which competent people, using their innate intelligence and ingenuity, can devise an infinite number of ways in which to collect and produce air intelligence — ways which must, of course, be within the framework of US national objectives at all times. Nevertheless, I feel very strongly that we should take a page out of the British Secret Service book and put our intelligence collection efforts on a basis where they can pay their own way, at least in part. This would be a long-term proposition and it would be impossible of achievement under the existing regimentation that governs all business enterprises in which the government is officially engaged.

COEQUAL STATUS WITH OTHER MAJOR STAFF ELEMENTS. There is, as far as I can discern, no rhyme nor reason in subordinating intelligence as a staff section to operations. My biggest objection to the subordination of intelligence to operations lies in the fact that the operations officer is automatically placed in the position where he frequently makes purely command decisions. The intelligence officer is supposed to advise the commanding officer as to what the enemy can and probably will attempt to do that would interfere with the accomplishment of the command mission. The operations officer is supposed to advise the commanding officer as to what his own forces can and should do. The commanding officer is then in a position to weigh both his own and the enemy's

capabilities and to make a sound command decision as to command action. It is totally wrong for the operations officer to make such a decision, for the commanding officer is thereby deprived of the full value (and probably full information) of enemy capabilities, vulnerabilities, and intentions. Zacharias, commenting on the fallacy of subordinating, told the Congressional Committee investigating the Pearl Harbor disaster that one of the organizational deficiencies which was a contributing factor was: [8]

> That the planning officers were allowed to take over the Intelligence function of evaluation. This resulted in individuals without a full knowledge of the Japanese or their psychology determining what the Japanese might do. This practice applied not only in Washington, but also at Pearl Harbor, where the erroneous conclusion was reached by the planning officer that there was no chance of an air attack on Pearl Harbor.

CONCEPT NUMBER TWO. *Success achieved by intelligence in peace will determine the outcome of the war.*

General Kuter stated: [9]

> In jet-atomic warfare there will be no room for gross errors of judgment. There will be no time, should hostilities start, to correct mistakes in the types of forces that we have provided, the manner in which they have been organized and trained, or the way we fight. And the terrible penalty for failure could be quick and complete defeat.
>
> Many factors are involved in any satisfactory answer. But one thing is sure. The question cannot be answered satisfactorily unless we have the proper doctrine, and unless the doctrine is accepted.

For years the US has believed that its greatest military po tential lay in its industrial might. The validity of this belie was demonstrated in World Wars I and II and again in Korea We can be sure that any Soviet attacks against this country will be planned to destroy not only our retaliatory force bu also our industrial potential. Thus we can see that "no longe

[8] Zacharias, p. 253.

[9] Kuter, Lawrence S., Lt. Gen., "No Room For Error," *Air Force Maga zine* (AWC Curriculum Handout #36-4-a, 24 November 1955).

will the US or any other country be able to build up its military forces and rely on its industrial potential after the war has begun." [10]

Intelligence must be developed before war breaks out if it is to influence our preparations, provide a foundation for our planning, and guide early phases of operations. It is true that Mr. Allen Dulles, present Director of the CIA,[11] achieved unprecedented success in the history of espionage with the intelligence network he established in Germany, operating from Switzerland, during the war.

> . . . Through this network Mr. Dulles managed to start a conspiracy within the high command of the German armies in the south and to bring about the surrender of the very army on which Hitler was dependent for the prolonging of the war from behind the legendary "Alpine redoubt."

However, the situation in Japan was a far different matter. Through shortsightedness and perhaps ineptitude and inexperience, the US had failed to establish the groundwork for an effective espionage system in Japan, notwithstanding the fact that Zacharias and other authorities on Japan had been aware of the need and had advocated such prior planning. In view of the steadily deteriorating relations that existed between Japan and the US right up to the surprise attack against Pearl Harbor, this failure to develop, in advance of war, a workable system for systematic collection (in Japan) of intelligence information during the war that most intelligence personnel were sure was virtually inevitable is an extremely black mark against the US intelligence agencies of that time. Moreover, this country made no serious effort to establish an intelligence net within Japan during the war because it was felt that the effort was far too great in relation to its possible value. Farago pointed out that it is a virtual impossibility ". . . to set up a local network in an enemy country under wartime conditions. . . ." [12] [Allen Dulles' success notwithstanding]

[10] Thomas K. Finletter, *Power and Policy*, New York: Harcourt, Brace and Co., p. 256.

[11] Farago, *op. cit.*, p. 183.

[12] *Ibid.*, p. 182.

How can we account for the fact that, against all reasonable odds, the US did establish a satisfactory espionage net in Germany after war started but failed to do so in Japan, its other major enemy? I suggest that the reason lies, among other factors, in the accessibility of Germany before the outbreak of war. In other words, more Americans and individuals from Allied nations had contacts before the war in Germany than in Japan. Interestingly enough, the Soviets failed to re-establish within Germany an adequate espionage net:

> . . . when their original network, known as the *Rote Kapelle* or *Red Orchestra*, was smashed. They managed to create such networks only in countries of their wartime allies, Canada, the United Kingdom, and the United States, and in neutral Switzerland, traditional battleground of international espionage.[13]

The Soviets did achieve remarkable success in Japan (remember the Sorge espionage case?) [14] It seems to me that there is a direct correlation between the accessibility of a potential enemy country just before the outbreak of hostilities and the probability of being able to establish (or re-establish) and maintain an espionage net in that country after war breaks out. What does this mean, as far as the US is concerned at the present time? If it is difficult to penetrate the Iron Curtain today, it will be even harder when war breaks out. Therefore, we must go all-out to penetrate it, and to establish many strong, diversified, and versatile nets as soon as possible. We cannot do this under the existing limitations of personnel, equipment, and funds. Yet maximum reliance must be placed on the ability of intelligence to decide by whom, when, where, and in what strength the US may be attacked. The responsibility of the Directorate of Intelligence (ACS/I, since 1 July 1957), USAF, is to develop this information regarding our susceptibility to air attack — this in an air-nuclear age.

CONCEPT NUMBER THREE. *Air intelligence must, on a continuing basis, encompass all aspects of power in foreign nations (political, economic, and psychosocial, as well as military), both in the present and in the historical perspective. Moreover, it must speak out on matters of national strategy.*

[13] *Ibid.*, p. 182.

[14] *Ibid.*, pp. 163, 166, 179, 181, 212, 219–220.

Heretofore, air intelligence (as well as army and navy intelligence) has confined itself primarily to an evaluation of the military power of foreign nations. The National Security Council has directed the air force to interest itself primarily in intelligence of foreign air forces and has assigned responsibility for covering other aspects of national power to the other US intelligence agencies.

It has long been an American tradition that the military establishment should remain free from the "taint of politics." As a result, the military has shied away from any contact with political problems. This even reached the point before World War II where few of the regular military establishment exercised their constitutional right to vote in elections.

This fear of military domination in our national life stems, of course, from our inherited distrust of all forms of tyranny and autocracy. Before the time that military power became inextricably tied to the other forms of national power, perhaps even as late as the First World War, this attitude may have had some validity in our national consciousness. However, Clausewitz would not have subscribed to the complete separation of military thinking from the remainder of national life and activities. He pointed out that war is merely an extension of national political policy by other means.[15] Hitler demonstrated his conviction that war is merely a "mopping-up process" by capitalizing on the gains made by his fifth column. Certainly the Marxists have from the beginning showed the world by word and deed that the line of demarcation between politics and military action is extremely nebulous.

It can and probably will be argued that air intelligence should "stick to its knitting" and concentrate on ascertaining the strengths and weaknesses of foreign air forces in the traditional fashion (in which the army is supposed to develop intelligence on foreign ground forces; the navy, on foreign naval forces; the air force, on foreign air forces; and the State Department and CIA, on foreign political and economic strengths and weaknesses). However, as it is air power that will have to carry the brunt of any initial contacts with the enemy, as well as continuously to seek out and destroy all aspects of the enemy

[15] Karl von Clausewitz, General, *On War* (Translation by O. J. Mattijs Jolles). Washington, D. C.: Infantry Journal Press, 1950, p. 16.

warmaking potential and will to fight, air intelligence must have the capability of advising the Chief of Staff, USAF, where and when to hit the enemy in order to hurt him most.

It seems incontrovertible to me that we have reached a place in history where the military establishment, particularly the air force, must concern itself with political problems (as well as the economic and psychosocial problems) — the traditional American feeling in the matter notwithstanding. General Samford, Director of Intelligence, Headquarters USAF, agreed on this point, in response to a question asked by the writer, following his lecture to the Air War College. He stated, in effect, "There is a growing community of thought that the military establishment should get into the fields of political and economic warfare, as well as psychological warfare." [16] Air intelligence, obviously, must be in the vanguard of this new approach.

CONCEPT NUMBER FOUR. *Intelligence must take a dynamic approach.* In speaking of the fact that data on the Soviet Bloc are inadequate, the Task Force Report on Intelligence Activities considered that security measures adopted by the Communists have been exceptionally effective, particularly in comparison with American security measures, which make it relatively simple for foreign nations to collect vital secrets. The task force admonishes, however:

> . . . The information we need, particularly for our Armed Forces, is potentially available. Through concentration on the prime target we must exert every conceivable and practicable effort to get it. Success in this field depends on greater boldness at the policy level, a willingness to accept certain calculated political and diplomatic risks, and full use of technological capabilities.[17]

Opportunities to increase air intelligence coverage of Soviet capabilities and intentions include:

a. The increasing of our clandestine operations and efforts to infiltrate the iron and bamboo curtains from all peripheral countries, taking maximum advantage not only of border-crossing techniques on land and by air drop but also neutral shipping and US submarines, particularly in the Arctic Ocean and the Black Sea coastal areas.

b. The establishment of contacts with and provision of support to (in return for services rendered) agents from among known governments in exile, such as those from the Baltic and East European Satellite nations; the known 10,000,000 Chinese living outside China, as minority groups throughout Asia; all known religious organizations, business firms, and governmental agencies throughout the Free World having dealings with the Soviet Bloc; all known visitors to Soviet-dominated territory, such as trade union officials, scientists, airline and shipping crewmen, and others; and all defectors from iron curtain countries.

c. The attempt to bribe, intimidate, subvert, or otherwise cause Soviet and Satellite diplomats, government officials, technicians, or visitors abroad to "double" for us upon their return — or to defect and remain in the West.

d. The making of surreptitious photographic penetration flights with high capability aircraft at irregular intervals, to cover peripheral areas.

e. The purchase of controlling interest in the most active Western firms having dealings with the Soviet or Satellite nations in order to use these firms to collect intelligence information, spread favorable propaganda, subvert Soviet and Satellite nationals, and otherwise create situations behind the iron and bamboo curtains that would be favorable to the West.

f. The employment of such outstanding historians as Alfred J. Toynbee; political scientists, as Professor William M. McGovern and Dr. Robert Strausz-Hupe; geographers, as G. Donald Hudson; ethnologists, as Margaret Meade; and authorities on Russia and Communism as Dr. Marc Szeftel and Mr. James Burnham. The individuals named represent only a few of the potential list of qualified consultants; the profound and detailed knowledge of foreign peoples and areas in their respective professions that is possessed by people of this stature would furnish a wellspring of ideas of inestimable value to air intelligence. In addition to enriching the staff with people of this caliber we should hire outstanding representatives in the advertising and public relations fields (preferably those having experience in foreign areas), who can assist the factual experts

[16] Samford, John A., Major General, "Objectives for the Use of Force," lecture to Army War College, 2 January 1956.

[17] Task Force Report, *op. cit.*, p. 69.

in packaging the ideas we want to use in our "War of Wits" with the Soviets, this struggle for the minds of men.

CONCEPT NUMBER FIVE. *Intelligence should be used as an offensive weapon, one capable of influencing the outcome of either the cold war or any hot war, peripheral as well as total.* Although there are no apparent indications that the Soviet Union, during the next few years, intends to take action of the sort that would surely precipitate another world conflict, we must be always on the alert to the possibility that such a conflict might arise through miscalculation on their part. The dangers are greatest in the peripheral areas, where Satellite peoples might get out of hand and take action "from which we cannot retreat without disaster; then the chances of keeping war limited are very remote." [18]

The difficulty is not in the lack of desire to exercise such restraint, but in the fact that the things we stand to lose are of such great value that there is no chance of limiting phases of conflict. To have mutual understanding and agreement between enemies is essential if conflict is to be localized. What does this mean to air intelligence? Simply this: we must produce intelligence on every facet of enemy life. To do this, air intelligence should control or at least coordinate all air force agencies that to any degree operate in enemy territory or attack behind enemy lines or perform other than strictly military operations in areas that may become the scene of battle or in areas where, in the cold war, the air forces encounter Communist influences.

CONCEPT NUMBER SIX. *Intelligence must be used systematically.* Commanders, policymakers, planners, and operations personnel at all echelons must rely upon, then plan, then act not only upon intelligence but also upon intelligence recommendations — within practical limits of our own capability and feasibility of such recommendations. We have long expressed as a principle of intelligence the concept that it must be supplied to the interested command in time to be of use. Unfortunately, in intelligence circles there has not been, it seems to me, equal emphasis placed upon submission of intelligence to the commander and his staff in such a form and so convincingly expressed that it will receive the prompt attention

[18] *Ibid.*

and responsive command action that it warrants. Stressing the need for reducing the margin of error inherent in any human undertaking, General White pointed out the need for educating our planners and our leaders. He said that poor command decisions and inferior or unimaginative staff work would nullify the tremendous effort that has gone into developing an extremely expensive air force. He added:

> . . . Superior employment of air weapons must be based on complete understanding of the nature of air warfare, the political and military context within which the air forces are operating, and a sound but imaginative understanding of targets and weapons.[19]

There also has been entirely too little emphasis on the concept that command plans and action should be based on intelligence. This has not always been the fault of intelligence. Nevertheless, too often in the air force, particularly, operational plans have been prepared with absolutely no regard for the intelligence estimate of enemy capabilities and intentions that these selfsame plans were designed to counter. In my experience as a staff officer at various echelons of command, there have been few instances in which command war plans, emergency plans, or operations plans have actually been geared to the intelligence that gave rise to the necessity for such plans. More often than not, the intelligence annex is merely prepared at the same time as the basic plan and the other annexes and all are stapled together at one time. The proper procedure, and the one that we in intelligence at USAFE (US Air Forces in Europe) were finally able to sell to the planners, should be this. The intelligence estimate of the situation is prepared first and given to the commander and to all his staff agencies in advance of the planning cycle. The basic plan and all the annexes (including the intelligence annex) are then prepared simultaneously, with a view to countering the threat indicated in the intelligence estimate.

I believe this failure to take the intelligence estimate into consideration at every stage in the planning cycle in the military establishment stems by and large from an American pre-

[19] White, Thomas D., "The Current Concept of American Military Strength," AU Quarterly Review, Vol. VII, Spring 1954 (AWC Curriculum Handout #56-2-B, 22 November 1955).

dilection for ignoring in the policymaking cycle available intelligence regarding the capabilities and intentions of actual or potential enemies.

It seems to me that the intelligence family must find some way not only to improve the quality of its product but also to stimulate an acceptance of that product and a willingness to act upon it. The process of making positive recommendations by intelligence for command action would, I believe, materially improve this situation and would lead to a command acceptance of a principle advanced by General Ridgway, when he was Chief of Staff of the US Army. He stressed the fact that the present world situation makes it more important than ever to have complete information upon which to base economical deployment and effective employment of army forces, as well as to avoid surprise (obviously the same principle applies to all military forces). General Ridgway stated: "Adequate intelligence constitutes the fundamental basis for the calculation of risks, the formulation of plans, the development of materiel, the allocations of resources, and the conduct of operation." [20]

CONCEPT NUMBER SEVEN. *Intelligence must continuously estimate enemy intentions as well as capabilities and vulnerabilities.* One of the biggest reasons that commanders at times have made their own estimates, rather than accept those of their intelligence officers, is simply that the intelligence officers have been unwilling to "go out on a limb" and estimate enemy intentions. Before the early 1930's the "method of intentions" was used by the US Army. It was a method used by the elder von Moltke. Shortly before 1936 the American Army adopted the "method of capabilities," which had been the method used by Napoleon.[21]

Admittedly the "method of intentions" is a difficult one and for the inexperienced intelligence officer, nonhabit forming because the probability of error is extremely high. Success for this method depends not only on an intimate knowledge of the mentality of the opposing commanders as well as the tactical doctrine of the enemy but also upon such intangible things as the physical and mental condition of the opponent, his normal reactions, and reasoning processes. On the other hand, the

[20] Farago, *op. cit.*, p. 8.

[21] Command and General Staff School, *"Military Intelligence,"* p. 7

"method of capabilities" takes into consideration all lines of action open to the enemy. It does not discard any possible line until the enemy's dispositions are such that, even though he desired to adopt that line, he is physically incapable of doing so. Thus it strives by elimination to reduce the possibility down to one — the only one line of action which the enemy can take. This is the ideal, as far as intelligence is concerned, but it is seldom reached.

CONCEPT NUMBER EIGHT. *Intelligence is no longer a function of command, except at the higher echelons.* All of the services (particularly the air force) have traditionally paid only lip service to the principle that intelligence is a function of command. This has been amply demonstrated by a lack of provision for suitable intelligence staffing between World War I and World War II and by a demeaning of intelligence functions. My reasons for believing that intelligence should no longer be considered a function of command at all echelons are different from either of these.

In the first place if an all-out global war should occur, the US intelligence operations should be centrally controlled. Second, the entire intelligence process cannot reasonably be carried out at all echelons; therefore, even in a prolonged period of cold war, air intelligence operations must be, if not actually centrally controlled from Washington, at least concentrated in a small number of locations where the complete intelligence process is directed by one individual. Unquestionably, in the past, commanders of squadrons, groups, wings, even air divisions and air forces occasionally may have felt a twinge of conscience because they have been unable to see their way clear to carry out all the intelligence functions that manuals said they should, from collection through dissemination. These individuals may now draw a sigh of relief, as I view it; for in the air force, their primary intelligence function is to disseminate down to the troops air intelligence that has been received from higher echelons.

It may be argued that I am hereby cutting the rug out from under the principle I previously expressed — that the intelligence officer should not be subordinated to other staff officers but should report directly to the commanding officer. On the contrary, in these lower units, and even when his recognized

duties are in accord with his actual duties, I still feel that the intelligence officer at every echelon of command should remain responsible only to the commanding officer or the chief of staff, and not to any other staff officer! He must maintain this independence of other staff considerations in order best to present to his commander the most complete intelligence picture and the most reasonable intelligence recommendations, even though he himself may not have developed either the intelligence estimate of the situation or the recommendations based on it.

At the major air force command levels there is no question in regard to major staff level standing for the intelligence officer as intelligence should continue to be for his commander a complete function of command, in the traditional sense. At the lower echelons, intelligence would still be a command responsibility, but rather more in the "special staff" tradition than the "general staff" concept.

CONCEPT NUMBER NINE. *Major headquarters staffs should get out of the operational aspects of intelligence to the maximum extent possible and should confine their attention largely to policymaking and flash or spot estimating functions.* This concept is closely related to some of the thinking indicated in the discussion of the preceding concept. Compared with the present tables of distribution, the intelligence staff of Headquarters USAF and the major subordinate commands would be relatively small. These staffs, however, would be comprised of highly qualified personnel, representing the maximum intelligence capability in the air force. Their functions would be primarily policymaking, inspection, liaison, and estimating. They would be prepared to give flash estimates of indications of the imminence of hostilities and spot estimates, as required by the commander and his staff. They would exercise staff supervision not only over the intelligence activities of all subordinate units of the command, but also over the collection and production activities of the intelligence centers belonging to the command; these centers would perform the operational aspects of the intelligence process for the entire command.

CONCEPT NUMBER TEN. *Air Intelligence (to include counterintelligence) must keep under continuous review and, to the maximum extent possible, must downgrade and publish its files concerning enemy capabilities, activities, and intentions.*

What I am proposing is nothing less than declassifying certain carefully selected items of intelligence and counterintelligence regarding Soviet activities and providing such information to the American public on a planned basis. Let the American people get this information, but from authoritative sources and not from newspaper columnists.

Probably the most violent opposition to this proposal will come from some of my fellow intelligence officers, because traditionally, intelligence has had a moral responsibility to protect its sources, and rightly so. Nevertheless, intelligence files are bulging with information that represents such a conglomeration from so many sources that no one source could possibly be harmed by its disclosure. Let us substitute this type of information for at least some of the detailed data on our own military establishment that we now hand out so freely. I am confident that the public reaction to this policy would, in general, be very favorable, and that in the long run, the story of air power and the capabilities of the air force to safeguard the security interests of the US can be made synonymous in the minds of the American people.

So let's stop giving aid and comfort to our potential enemies and start a program designed to discomfort them on a global scale — by informing and arousing the American public and the rest of the free world with factual knowledge of Soviet activities and intentions. For example, an article in the September 1955 Reader's Digest discussed the disturbing story of the manner in which the Communists, who had infiltrated the military services and governmental structure of Iran, were prevented from taking over the entire country by the merest accident. As a result of the investigation, it was disclosed that five hundred Iranian officers were implicated in the plot, including numerous high-ranking individuals in both the Army and the police departments.[22]

This story, terrifying in its implication for other countries, would, I submit, have had a much stronger impact on public awareness of the Communist threat to the world today had it been officially released by a government intelligence agency, rather than by a commercial writer. This is the type of run-

[22] Joseph A. Mazandi and Edwin Muller, "The Hunch That Saved Iran," Reader's Digest, September 1955, pp. 59–60.

of-the-mill basic intelligence available to the services which should be released to the public as soon and as fully as is practicable and, in any event, before some sharp news reporter can capitalize it.

CONCEPT ELEVEN. *All air intelligence concepts must be considered dynamic, kept under constant review, and revised to meet changing world situations.* It follows that air intelligence philosophy must be considered in its broadest sense as a constant search for principles. The doctrine and policies resulting from this process must be changed as new concepts are developed.

In this context, General Kuter provides another valid concept for developing an air intelligence policy, although he was applying it in the larger sense to the whole spectrum of air force thinking. "A true air doctrine accepted and exploited is the key to a sound military policy. We have the doctrine, now we must exploit it in a common strategy." [23] We don't, as yet, have an air intelligence policy or doctrine in writing, but if USAF will adopt that last admonition of General Kuter's as the basic air force intelligence policy, it will be only a matter of time until we have an air intelligence doctrine — one on which the commands may then soundly base their own intelligence policies.

[23] Kuter, *op. cit.*, p. 29.

DEVELOPMENTS IN AIR TARGETING
I. THE MILITARY RESOURCES MODEL

Robert W. Leavitt

The basic objective for air targeting is to present measurements of the ability of the enemy to take actions which threaten our national security. These measurements must be presented in such a way as to guide our action against the enemy's strengths. This objective is usually broken down into subobjectives which illustrate clearly its breadth and complexity. Expressed in terms of courses of enemy action which are unacceptable to the US, these subobjectives are, in descending order of importance:

1. To deliver atomic weapons against the US, our forces abroad, and our allies.
2. To resist the penetration of his airspace by our air forces.
3. To develop and produce potentially decisive weapons or weapons systems.
4. To conduct large-scale land and naval operations against our forces and our allies.
5. To develop and maintain the economic, political, and psychological strengths necessary to support prolonged military operations.

With the development of new weapons and weapons systems, however, and the resultant capability of a single aircraft or missile to deliver the equivalent of millions of tons of TNT on one mission, the analysis and presentation of the strengths supporting the first three subobjectives have assumed ever-increasing importance and urgency. This compression of firepower in time brings the realization that the decision in future wars may be reached in a matter of hours or days at most. Old problems have been accentuated and many new ones created by these developments. For example, selection of target systems to achieve the subobjectives time-phased in the order shown above is no longer sufficient. Analysis must produce not only a priority of targets within each subobjective and target system, but also an indication of how many of them

must be attacked to achieve the objective. Thus analysis by increments in time and space is becoming an essential element in the targeting process.

The complexity of these problems and the speed with which they must be solved have led to the introduction of new statistical methods and of new machine computing techniques into the targeting analysis process. For example, immediate assessment of the damage and contamination effect *of a given attack* will be necessary in order to determine the destruction required *of succeeding attacks*. This involves a continuing evaluation of target priorities and of net offensive strengths throughout an air offensive until a decision is reached. Two-sided war-gaming offers the best possibility for providing the answers needed for this and similar problems. Because of the time element and the great volume of data required by the new statistical techniques, high-speed electronic computing is essential. By this process hypothetical but highly probable military situations in both peace and war can be examined and tested for the types of detailed targeting information needed by the analyst to guide and evaluate target selections. Only in this way can the total targeting effort truly be said to present measurements of the enemy's strengths in such a way as to facilitate action against them.

During the last several years it has become increasingly apparent that mathematical "Monte Carlo" and "input-output" type models offer a new and promising technique for "war-gaming" and for analyzing a nation's economic and military resources for targeting purposes. The rapid advances in the speed and data handling capacity of modern electronic computers have now made these models feasible for application to many air targets problems.

The purpose of the mathematical models is the selection of targets for optimum forestalling of enemy courses of action. This requires the models to answer the following questions in order.

1. *Present situation*

a. What is the size and composition of the enemy military establishment (military resources)?

b. What is the size, composition, and productive ability of the enemy economy (economic resources)?

c. What levels of military action will these resources support?

2. *Mobilization capability*

a. What would be the size and composition of enemy military resources and economic resources after an all-out mobilization period of x months?

b. What levels of military action would these resources support?

3. *Evaluation of damage*

a. For any specified bombing attack what would be the yield and location of all exploding weapons?

b. Given these explosions what would be the size and composition of the post attack military and economic resources (including population)?

c. Given the post attack resources what level of enemy military action could be maintained?

4. *Recuperation*

What would be the size and composition of enemy military and economic resources y months (or days) after the specified attack, taking into account repair, rebuilding, conversion of other facilities, and new construction?

For "war-gaming," that is, estimating net offensive capabilities, the above questions must be asked about our own country as well as about the enemy country.

The system of mathematical models which would answer these questions is shown schematically in Figure 1.

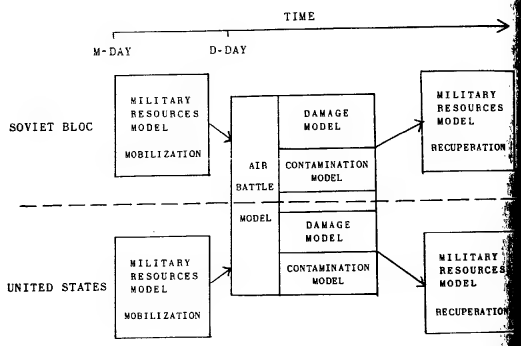
The air battle, the damage, and the contamination models would answer questions 3a and b above. Discussions of these models are planned in subsequent issues.

The remaining questions concerning the present, post mobilization, post attack, and post recuperation capabilities of the military and the economy are the province of the military resources model, which includes economic resources.

Procedurally, the military resources models determine the number and size of missions, both offensive and defensive of various types, which each country can carry out in a given span of time. This information is fed to the air battle model which together with the damage and contamination models deter-

FAMILY OF INITIAL MATHEMATICAL MODELS FOR

AIR TARGETS ANALYSES



mines the military, economic, and population resources remaining in each country after a period of air battle. The damage information is in turn fed back to the military resources model which determines the number, type, and size of missions which each country can carry out *after the first phase of air battle.* The process is then repeated for later phases of the air battle.

If the models can, as is believed possible, answer the questions posed we have an exceedingly powerful tool not only for target selection, but also for estimating the capability of a country to carry out military action now and in the future under various conditions and assumptions. The testing of alternative target systems in the first and succeeding phases can lead to the choice of the optimum target system for any of several different strategic situations.

When then, is the military resources model and how is it designed to answer the questions put to it?

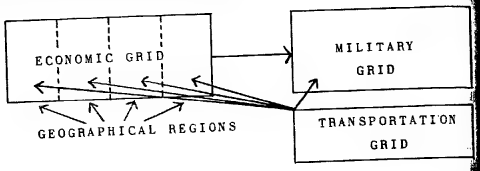
The military resources model is an input-output model. This is a kind of mathematical model about which it has been said, it is much easier to understand what it is expected to do than how it does it. What the military resources model is expected to do is to estimate the capabilities of a military establishment and its supporting economy to carry out military action. The essential problem of making this estimate is that everything must be considered simultaneously.

It is not enough to know that the capacity of the aeroengine industry is so many engines per month. One must also know whether there is enough steel (or electric power, copper, petroleum, ball bearings, and so on) to produce these engines while at the same time the tank, gun, shipbuilding, ammunition, and many other key industries (including reconstruction in a post attack period) are also requiring steel. Furthermore, not only the direct demand for steel must be considered. The aeroengine industry consumes not only steel but also aluminum, electric power, transportation, and many other inputs, the production of which also requires some steel. In short, to know the capabilities of one industry we must account for requirements of all industries for a vast range of raw materials, labor, capital equipment, components, goods in process, transportation, and communications. Input-output models are a technique for doing just this. An input-output model shows for

each industry (or military activity) the requirements for supplies from each other industry.[1]

The military resources model consists of three sub-models or grids; the military grid, the economic grid, and the transportation grid. The economic grid is in turn broken down into geographical regions which are related to each other by the transportation grid. The military resources model can be illustrated schematically.

THE MILITARY RESOURCES MODEL



Each of these grids consists of an inventory of resources and a table of coefficients in the form of inputs required per unit of output. For the economic grid the inventory of resources is the capacities of all producing industries. The table of coefficients shows material, labor, and capital inputs per unit of industrial output; for example, kilowatt hours of electricity per ton of aluminum and tons of aluminum per heavy bomber aircraft. The military grid shows labor, equipment, and supplies required per unit of military activity; for example, tons of fuel per flying hour, number of aircraft per wing, tons of ammunition (by type) per division month, and so on. Its inventory of resources is the number of military units of each kind and their associated equipment. The transportation grid has as its output units of transportation capacity on a regional basis. This grid acts as a restraint on both the economic grid and the military grid as transportation can be a bottleneck or restraint both in the economy and within the military structure itself.

[1] See *Studies in Intelligence*, Vol. 1, No. 4, "The Role of Interindustry Studies in Economic Intelligence," Robert Loring Allen, p. 97.

SECRET

Without knowing the full complexity of the statistical and computational procedures (which is awe-inspiring) the reader can now visualize the operation of these grids in answering our initial questions. The military grid shows for a given set of military forces the level of combat actions that could be maintained if the economy provides all the supplies the military requires. The coefficients of the military grid determine the requirements of the given level of combat actions from the economy. The economic and transportation grids determine how much of these supplies can be forthcoming from the existing inventory of economic resources.

At the present time the economic grid of the Soviet Bloc has been largely completed. It has been constructed in two parts — one covering the USSR and European Satellites and the other the Peoples Republic of China. For the European Bloc the grid distinguishes 240 producing industries or sectors and their materials, components, capital equipment, and labor inputs. Five test runs have been made and evaluated.[2] On the basis of the evaluation of these test runs, application of this grid to certain types of live air targets problems is now being undertaken. However, a substantial data improvement research program is going concurrently.

The military grid has been under development for about nine months. It is expected that test runs of this grid will be made in the summer of 1958.

The transportation grid has been under development for about six months, and it is expected that test runs of this grid will be made in the summer of 1958. The construction of this grid is being undertaken on two fronts. The first involves the geographic disaggregation of the economic grids in terms of local regions. The second consists of the development of a transportation grid based on these regions. To date, 159 regions covering the USSR have been designated, outlined, and coded. The transportation net has been divided according to these regions and the terminals and links within each region coded and catalogued. The 159 regions correspond to Soviet oblasts wherever possible in order to take advantage of the data

[2] Distribution of these runs has been made throughout the intelligence community. A few copies are still available for interested readers.

SECRET

on production and transportation published by the Russians. The effort to gather Soviet source information for the grid is linked to a concerted effort to gather applicable data, both classified and unclassified, from all other available sources.

The enormous complexity of the computations involved in model analysis makes hand calculation completely unthinkable. In the economic grid for the European Soviet Bloc, for example, there are per unit of output of each of the 240 sectors the commodity input requirements from each of the other 239 sectors. This will be further broken down into 159 geographical regions. Thus the number of coefficients to be simultaneously processed theoretically could be of the order of 240 x 240 x 159, or about 9 million.[3] For any major problem millions of individual arithmetic steps may be involved. Modern electronic computers, however, can perform this job. The revolutionary aspect of these computers is the speed with which they can file, sort, recall, and manipulate large masses of data. These partially routine steps in arriving at intelligence estimates on large areas, such as the Soviet Bloc, have always been time-consuming and cumbersome. For the more difficult analytical problems, electronic computers together with mathematical models provide the analyst with a tool for considering and holding in juxtaposition a great many more of the elements of the analysis than formerly was possible. This technique does not, by any means, eliminate the human judgment factor. Rather it is believed that it will prove to be a powerful tool in assisting intelligence analysts and planners to make better judgments, and to be able to make them more rapidly.

Some of the more specific applications of the military resources model to air targets problems are presented below.

1. *Enemy Capabilities*

The military resources model can be used to assess the capability of the economy of the Soviet Bloc to mount and sustain elements of military strength during a pre-attack period under varying Bloc objectives, policies, and assumptions. The government is constrained to work its available resources within technological relationships. If it wants a jet medium

[3] The number is actually smaller since many of the coefficients are zero. Only a machine, however, could remember which ones are zero.

bomber regiment it must provide planes, bombs, crews, airbases from which to operate, and so on, in specific quantities. If a ton of steel is needed the government must see that steel mill capacity, pig iron, scrap, coal, labor, and so on, are available in the correct amounts. If more steel capacity is needed it must provide the steel, concrete, machinery, and so on, in the right quantities and types to construct a new steel mill. These resource restraints and technological relationships are set out comprehensively and in detail by the military resources model. The ability of the economy to support the mobilization of desired combinations or "mixes" of air, land, and sea forces can be measured. A typical problem would be a determination of the maximum "balanced" air, land, and sea forces which could be activated in a specified mobilization period with specified stockpiling and capital expansion policies. In addition to measuring the maximum activation of combat units, the economic grid can be used to determine under a variety of Bloc policies and objectives the maximum capability to produce specific weapons such as guided missiles and H-bombs at specified times.

However, the economic-industrial grid does not take into account any restraints or bottlenecks that might develop within the military structure itself. Therefore, the outputs of the economic grid are fed into the military grid as inputs. The military grid is then used to assess the capability of the Soviet Bloc military structure to mount and sustain, during a pre-attack period, elements of military strength fully prepared to engage in combat activities required by given strategies. The ability of the military structure to support desired combinations or "mixes" of air, land, and sea combat activities can be measured under varying Bloc mobilization objectives, policies, and assumptions. In addition to measuring the maximum combat capabilities that can be sustained, the military model can be used to determine the capability of the military structure to put into operation specific weapons, such as guided missiles, within the available military resources, that is, trained personnel, missile sites, logistics, and repair facilities.

The transportation grid would then be used to establish any transportation restraints or bottlenecks which might develop within the economy or military structure itself.

2. *Effects Analysis*

Following their use in pre-attack situations, the three grids of the military resources model can be used to determine the capability of the Bloc economy, military structure, and transportation system to re-mount various types of military strength in the post-attack period after air attacks of different scope and intensity. The analysis can be applied to various time periods after the air attack. In very short periods of time only the military, or possibly the military and transportation grids might come into play, as the answers needed would be the availabilities within the immediate military structure of the Soviet Bloc to re-cycle air attacks and to sustain ground and naval action. These answers would be in terms of availabilities of aircraft, runways, fuel, men, and ammunition to produce flying hours, and the needed inputs to produce ground division months and units of naval action. The longer the time period involved the more industrial and economic resources must be analyzed and brought into play as supporting military resources. In the analyses of recuperation periods of over a few months the economic-industrial grid is heavily drawn upon. However, the model as a whole is designed to cope with immediate post-attack military assessment, as well as long range economic and industrial recuperation assessment.

3. *Selection of Air Targets*

One of the outstanding advances of the model-computer technique is the possibility of rapidly testing a great variety of simulated air targets problems, using various assumptions, and considering air attacks of varying magnitude and scope. Optimum air target systems can be developed for a variety of circumstances as a result of repeated running of both pre-attack capabilities problems and post-attack air target effects problems (a. and b. above). The resources such as airfields, missile sites, storage, supply, repair facilities, and industrial and transportation installations which prove to be limiting factors or bottlenecks in pre-attack mobilization problems and in the re-mounting of combat activities in the post-attack period become the air targets. The same techniques applied in simulated problems would, of course, be applied to actual hot war problems.

4. *Feasibility Testing*

The necessity for balancing the internal flows within the matrix of an input-output model make this type of model particularly suitable for testing the internal consistency of either announced Soviet Bloc plans or of US intelligence estimates of Soviet Bloc military or economic growth patterns. For example, the internal consistency of either Soviet Bloc plans to mount military strength or US intelligence estimates of Soviet Bloc military growth plans can be tested. Estimates independently projected for various types of air combat strength can be tested one against the other in order to determine whether or not the total projected strength estimate is internally consistent and whether or not such total strength can be supported by the Soviet Bloc military structure. The economic grid can be used to check production estimates independently arrived at for various military end products to determine whether or not the production pattern so established is economically feasible. The transportation grid should be of great help in checking estimates of Soviet Bloc transportation patterns and capability.

5. *Mobilization Indicators*

The military resources model can be used to establish indicators of mobilization build-up. By testing the model under various assumed mobilization conditions certain economic changes as well as changes within the military structure can be identified as indicators of partial or complete mobilization. Specific changes in the use of resources can be identified as indicating specific types of mobilization.

6. *Intelligence Collection Indicators*

In using the military resources model to solve a series of simulated air targets problems, certain areas of economic and military activity will be shown to be of critical significance to the capability of the Soviet Bloc to mount and maintain military strength. These critical sectors are those on which it is most important to obtain accurate, current data for targeting purposes. Thus the priority list of air targets intelligence requirements can be sharpened, and emphasis can be placed on the collection of certain key military and economic data.

7. *Inputs for Operational Models*

The military resources model is to be used to translate any given over-all military strategy into requirements upon the

economic-industrial, transportation, and military structure for the creation of military formations and military resource elements together with the necessary military supporting activities in both pre- and post-attack situations. Operational models such as the air battle model, currently being tested, serve to indicate these requirements in a realistic manner. The military resources model is designed to provide appropriate inputs for these operational models in the form of units of combat capability and to reflect the output of operational models in changing requirements upon the military structure. Thus the military resources model can define the maximum levels of combat activity possible within the limitations of the Bloc military and economic structure at any specified time.

8. *Data Requirements*

The validity of problem solutions provided by the military resources model is dependent upon the accuracy of the data inputs as well as the logic of the mathematical design of the model. Each of the component parts of the model — the economic grid, the military grid, and the transportation grid — has its own data requirements which must be initially assembled and subsequently kept up to date.

The economic grid contains a classification of economic activity in the Soviet Bloc in the form of three submatrices or grids; the commodity input grid, the capital input grid, and the capital expansion grid. The data requirements of the commodity input grid or matrix consist of the commodity inputs per unit of production for each of the 240 sectors of the matrix. These sectors cover most of the commodities produced in the Bloc. The data requirements of the capital input matrix consist of the inputs of capital equipment and labor per unit of production of each of these same commodities. The data required by the capital expansion matrix consist of the commodity and capital inputs necessary to increase available capital by one unit. The data described above are in the form of technological coefficients which reflect the technological relationships currently operating as the economic restraints in any desired mobilization or recuperation by the Soviet Bloc. In order to reflect fully the flexibility of the Soviet Bloc economy in meeting mobilization or wartime requirements the data inputs must reflect not only production processes currently in use but also the alternative processes which could be used

break bottlenecks, or stoppages resulting from air attack. Thus the economic grid requires the introduction of all practical alternate input coefficients in order to establish realistic technological restraints. Because production technology changes with the passage of time, these coefficients must be continually scrutinized to insure that they reflect current technology. In addition, changes are necessitated in the classification of commodities and capital equipment in the light of experience gained in using the model for various types of problems. Those economic sectors which prove to be the most sensitive to mobilization or recuperation demands may require a more detailed or disaggregated classification in the model, whereas less vital sectors may be further aggregated.

The running of a simulation on the economic model requires, in addition to the technological coefficients, data on the economic resources available to the Soviet Bloc for the time period being considered. Thus for each of the 240 commodity groups in the grid, current data on Bloc capacity, inventory, and foreign trade must be assembled.

The data requirements of the military grid of the model parallel those of the economic grid, but pertain to military activities rather than economic activities. As previously mentioned, the output of the military grid, equivalent to commodity outputs in the economic grid, is in units of frontline activity, for example, flying hours of a specific type of bomber. For each such military activity data on inputs of other military activities as well as inputs of industrial commodities must be determined. In addition, for each unit of military activity the requirements of military capital aggregated in the form of "resource elements" such as airstrips, naval bases, and repair facilities must be determined together with the inputs necessary to expand a military "resource element" by one unit. As in the case of the economic grid, input data for alternative processes of producing a unit of military activity must be assembled and all coefficients in the grid must be kept in accord with the most modern logistical processes used by the Soviet Bloc. In the running of simulations on the military grid, data on total Soviet Bloc capacity, inventories, and possible increments from foreign trade for each of the military activities in the grid should be available for the time period under consideration.

The introduction of transportation factors into the military-resources model requires an analysis of the Soviet Bloc economic and military commodity flow structure in terms of geographic regions, thus greatly increasing the data needs. For each region the types and amounts of transportation facilities available must be determined in order to establish the freight-handling capabilities of each region. For example, the analysis of the USSR railroad system, currently underway, requires for each terminal, link, and region estimates of the terminal motive power and freight-car handling capacities, rail-link capacities, and regional car-day requirements. In addition to these transportation data requirements, the Soviet Bloc production and consumption pattern must be established by geographic region. This task requires the identification of the types and amounts of economic and military capital facilities, or "resource elements," available in each region. In addition, the Soviet Bloc "bill of goods," or final demand for military and civilian goods, must be determined by geographic region. The regional consumption of goods for military, government, and civilian use as well as the regional consumption of construction materials and producer durables must be estimated. Only when all these data are introduced into the military resources model can the transportation restraints, or "bottlenecks" under specified mobilization and recuperation conditions be identified.

The data problem is formidable, but considerable progress has been made, and new sources of data are being found and exploited. The data requirements for the model-machine technique do not represent a marked change from the requirements of traditional methods of analysis. However, the rigorous analysis made possible by this technique or method simply makes existing data deficiencies more apparent. Moreover, this technique has the additional advantage of enabling the analyst to identify those specific data requirements which are the most crucial in target analysis by subjecting the data to various types of sensitivity testing, e.g., the variation of coefficients, and data aggregations. The model also offers a means of testing the reliability of coefficients in the light of known output patterns of past years. It is believed that these various testing techniques will contribute to a sharpening of the priority list of intelligence collection requirements.

HORRIBLE THOUGHT

W. A. Tidwell

The headshrinkers' literature is full of remarks about the efforts of mankind to avoid thinking. As a matter of fact, I rather imagine that a very small proportion of the brainpower of the most creative thinker alive is ever devoted to creative thought. In our society a fairly large proportion of this small amount of creative thought is devoted to finding ways to help mankind avoid thinking. Games, alcohol, tranquilizers, TV, and business routine can all be used to help an individual fill 24 hours a day without ever having a creative thought. We like cliches because they help us sound confident without thinking. This does not mean that the average man is idle. On the contrary, he is probably a very active and useful citizen. As a matter of fact, idleness is generally abhorred because it leaves a vacuum that is an invitation to thought.

You and I may be exceptions to this general pattern in some small degree, but I want the reader to recognize that if this paper contains one small original thought, it will be here only as a result of tremendous psychic effort spent in overcoming my own urge not to think, and that if this thought, in its turn, stimulates any creative thinking in the mind of the reader, it will be only over the opposition of your shrewd and dogged subconscious which tries so hard to protect you from the rash act of thinking.

Having drafted this challenge to the reader's subconscious, I now propose that we think about some of the problems of intelligence. (I almost said "*look* at some of the problems of intelligence." This just goes to show you how my subconscious abhors the sound of the word "think.") To pose the problems that I would like us to think about, I want first to go back into a little intellectual history. Some of the readers will be much more familiar with the events that I am about to describe than I am, but here at least is my version.

In the early days of the postwar intelligence effort, the attention of the intelligence community was focused primarily on the interpretation of surface phenomena. Some of the

questions at issue were almost unbelievably naive. For example, there was not complete agreement on the general nature of the Soviet Communist system, and there was a great deal of discussion about the role of local Communist parties; some people feeling that these were indigenous parties, and other people feeling that they were part of the Soviet apparatus. During this period there was no agreement concerning standards of analysis in the intelligence community. At one extreme, some people used biased and emotional arguments without regard to system. At the other extreme, some people claimed that local Communist parties were not part of the Soviet apparatus because there was not enough evidence on this question to settle the matter in a court of law. As time went by, however, the intelligence community more and more came to accept the standard techniques of political sciences, economics, sociology, and so forth, and attempted to conform to academic standards and rule of evidence.

General agreement on standards of thought tended to shift the major problems in intelligence into the realm of facts. It was agreed that a given situation should be interpreted by the use of the techniques of economics then the size of the gross national product of a country involved in the situation under study became an important fact, having great bearing on the final analysis of the situation. The intelligence community, therefore, went through a period several years ago in which major questions of the fact were important issues. Some of us remember the blood and sweat shed over the numbers of Soviet planes produced, the size of the gross national product of Communist China, and the adequacy of the Chinese rail roads. The list could continue *ad infinitum*.

The focusing of the intelligence community on major questions of fact led to the development of additional techniques for the establishment or verification of facts. Some of these techniques, like the factory markings program, could be generally understood and accepted throughout the community. Even in this field, however, and in related fields involving sophisticated statistical techniques, acceptance of the new method was neither immediate nor complete. Other techniques of analysis in political and social fields also left some members of the intelligence community gasping in their wake. At this point, the intelligence community entered a stage which will

always be with us to some extent. It is the stage in which arguments about fact are caused by the technological gap between the informed and the uninformed analyst. This is a gap that training and experience have narrowed considerably and which probably can be narrowed even further in the future, but it probably will exist to some degree as long as some parts of the intelligence community develop new methods and new ways of thinking and other parts of the intelligence community lag in knowledge and understanding. It is not necessarily a bad phenomenon. It at least means that somebody is out in front and doing some thinking. It keeps the other fellows on their toes.

As a result of over 10 years of development, the intelligence community has now reached a high level of sophistication in the application of standard techniques of analysis to intelligence problems. Subsidiary methods such as style of writing and the manner of presentation are excellent. The community seems to have learned how to produce very good answers to intelligence problems without generating an undue amount of internal friction. All this is cause for considerable pride and satisfaction.

As good as we may be, however, we are obviously not good enough. We have just seen a classic example of one of our major outstanding difficulties in the question of US policy toward the launching of the Soviet earth satellite. There was no failure of intelligence to report the facts relating to the Soviet satellite program well in advance of the event, and intelligence also pointed out that this event would be of distinct advantage to the Soviet Union in the field of political prestige. Intelligence had done the job our customers normally expect of us, and yet in a real sense, the US was caught napping. The US prepared a plan of what to do *after* the Soviets had launched a satellite, but we did not take any action or even decide to take any action *before* the event. In other words, our planners did not fully recognize the magnitude of the blow the Soviet launching would give to our prestige. It would be very easy for us to sit back smugly and blame the unfortunate consequences on the policymakers, who were adequately informed in advance but who did not take adequate action in advance. Could it be that we have not yet established adequate confidence in our product in the minds of our consumers? Could it be that the

fault still lay with the intelligence community? Could it be that we have not yet devised the proper method of presentation which would permit us to say "damn it, we mean it!"

If we are willing to recognize that it is possible for intelligence to "fail" even when it is shrewdly accurate and timely, we might find further food for thought in looking at the problems that we are being shrewdly accurate and timely about. They tend to be problems that have a fairly immediate practical application. No one could object to our tackling such problems. When one looks for analysis in depth or in terms of long-term trends, however, we find that it is generally lacking in our formal publications. The bold analysis, the sharp intuition, the long step ahead, and the provocative ideas are generally found in informal bull sessions; in "think" pieces that have no true status; in the internal staff memoranda of ONE, OCI, and so on; and in some of the briefs and background material used by the DDI on an ad hoc basis. They are almost never found in the formal papers put forward by the community for the sober guidance of our planners and policymakers.

There are strong conservative influences in our present system of producing intelligence which would tend to resist change in anything involving method and type of analysis, form of presentation, and so on. Might we not be at a point of development, however, where we need to make a quantum jump in the conduct of intelligence? Is there any way in which intelligence can learn to say better "we mean it," "these are the problems that may arise in consequence," "these are the decisions that must be decided?" How can we extend our analysis in time and depth beyond present dimensions and yet carry with us the conservative elements in the intelligence community?

There might be changes in organization or in the mechanics of presentation which might improve our impact on the formulation and execution of national policy. These things should be explored, but no such changes could create, by themselves, the change in the intellectual and visceral impact of intelligence that we must aim for. The only sure way to conduct national affairs with greater wisdom is for the responsible officials to think smarter thoughts. There is no mechanical or organizational substitute for brains. Intelligence is an important and integral part of the process by which we conduct our national affairs, and intelligence officers, therefore, have

tremendous responsibility to apply themselves to new ways of thinking which will give us a more brilliant insight into the dynamic world and our constantly changing place in it.

The real area in which we must seek improvement, therefore, is in that related to analysis. Perhaps we must learn to pose a different kind of question to ourselves. Perhaps we need to learn to think on a different time scale. Perhaps we need to develop even more new methods of analysis. Perhaps we need to do some combination of all of these things, and many others as well.

There are probably many different ideas that should be examined. Here is a sample of the kind of thing that we might think about. Might it not useful for us to engage systematically in backward analysis from hypothetical cases? For example, intelligence predicted the launching of the Soviet earth satellite and said that it would have unfortunate consequences. But let us suppose that several years ago we had posed the following question: "What would be the impact on the policy situation of the US and on its prestige if the Soviet Union were to accomplish some technological breakthrough which would support a Soviet claim for Soviet supremacy in the field of science and technology?" If we had had this sort of analysis, it might have been possible for us to point out in a much more meaningful manner the way in which the Soviet missile program and the development of a Soviet earth satellite might place the Soviet Union in the favorable situation envisaged in our hypothetical analysis. We could pose other similar questions such as: "What will be the effect on the world political situation when Soviet industrial production equals US industrial production?" "What would be the consequences if all of the 'third force' groups backed by the US came to power and 'right wing' parties disappeared?" "What would the world look like after 20 years of disarmament and 'peaceful coexistence?'" Analysis of these questions might put a vastly different light on intermediate developments leading toward the hypothetical situation we have posed for ourselves.

There is undoubtedly room for improvement in our work, but unfortunately as we get better and better, we have more and more justification for continuing to think and do exactly as we have been thinking and doing. This is more and more justification for not thinking creatively about improvement. We

know, however, that there will always remain an important challenge to us in intelligence as long as the US does not act to accommodate itself adequately to world developments. What do you think that we should do about it?

ELINT
A SCIENTIFIC INTELLIGENCE SYSTEM

Charles A. Kroger, Jr.

During the initial phases of the Battle of Britain a German bomber, relatively safe under cover of darkness, flew over the blacked-out landscape heading for London. At a specific moment the bomber dropped its bombs, which accurately hit their target, and another successful German Luftwaffe attack was history. Electronic advancements by the Germans made this possible. British interception and analysis of this new electronic bombing device countered the Germans' success and continued to render less effective every subsequent electronic advantage the Germans developed. In a parallel manner the Germans developed a highly effective electronic intelligence effort directed against the Allied raids originating from Britain. This phase of electronic intelligence, utilizing electronic means to determine enemy electronic capabilities, began in England just before World War II and has been an ever increasing effort which today is called ELINT.

ELINT is a coined word for the process of electronic intercept and analysis or electronic intelligence — a process about which very little has been written. The intelligence officer, unless he is in the electronics field himself, has had little contact with ELINT. By directive ELINT is defined as: "the collection (observation and recording), and the technical processing for later intelligence purposes, of information on foreign, non-communications, electromagnetic radiations emanating from other than atomic detonation sources." In simple terms, ELINT is the detection and analysis of radiations from foreign electronic devices for the purpose of extracting information of value to intelligence.

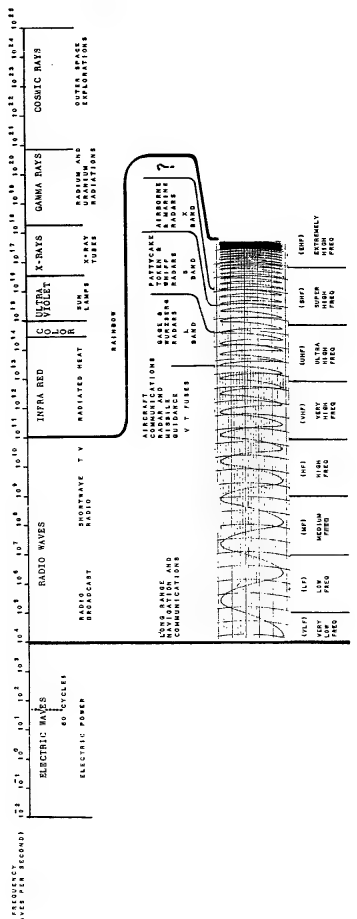
Just as a flashlight radiates a beam of light observable to the human eye, electronic devices emit or radiate nonvisible, non-audible radiations which are detectable and recordable, using electronic devices just as the human ear hears sound. This interception or collection of enemy radiations is the first stage of ELINT.

The formal definition restricts ELINT to "noncommunication electromagnetic radiations other than atomic detonation

sources." This means that ELINT is responsible for all radiations except those used in voice or other communications such as radio or telegraph and those resulting from atomic sources. What other kind of radiations are there? To name a few with which ELINT deals, there are radiations from missiles and missile guidance devices, radiations from developmental laboratories and field testing stations working on electronic devices, radar, navigational aids, anti-aircraft and aircraft gun direction, air-to-air or air-to-ground identification signals, and so on.

"Technical processing for later intelligence purposes" means subjecting the collected ELINT raw data, usually in the form of beeps on a magnetic tape or wire, to a detailed analysis by use of complex electronic equipment. This equipment permits the analyst to hear with his ears, to see on an oscilloscope, to measure very accurately, to photograph, to compare with standards and to investigate the intercepted signal in as many ways as are necessary to identify the characteristics of the foreign device. When the "technical processing" is completed the technical analyst can pass to the intelligence analyst detailed information on the location and capabilities of the foreign device. The intelligence community can then combine this information with other knowledge to estimate the over-all competence and possible intentions of foreign powers.

For a technical look at what ELINT really is let us turn for a moment to basic physics. Here we remember that electromagnetic energy, like light, travels in waves. These waves vary in length and form a spectrum. We are all familiar with the rainbow with its colors ranging from red, having waves of 760 millimicrons in length (400 million megacycles/sec), to violet with waves of 385 millimicrons in length (800 million megacycles/sec). This color spectrum is a part of the electromagnetic spectrum. The radio portion of this electromagnetic spectrum is used primarily for communications and military weapons. Currently the military weapons use radio waves varying from a few thousand cycles (waves per second) up to 100 kilomegacycles (one hundred billion waves per second). The following diagram illustrates the position of the radio and color spectrums in the over-all electromagnetic spectrum and an expansion of the radio spectrum showing the bands where different Soviet electronic devices radiate.



For a specific example of how ELINT works, let us take a simplified look at Soviet radar. Soviet radar devices radiate electronic impulses at certain frequencies and in definite beams searching the sky for long distances and great altitudes for any object that may be present. When these impulses strike an object they bounce off and return to a ground or airborne receiver which calculates the length of time between emission and reception and the strength of the signal received. From this, the Soviet radar operator can generally tell the size, speed, direction, altitude, and other pertinent information about the unseen object. Our Strategic Air Command, with its retaliatory mission, urgently requires every possible bit of information on Soviet radars — particularly on their location and capability. This is where ELINT goes to work. By intercepting, amplifying, recording and analyzing an enemy radar signal or pulse, we can learn all about it. By studying the type of radiation, its modulation (AM, FM, pulse) its pulse repetition rate, pulse duration, pulse shape, its radio frequency (position on the electronic spectrum), its antenna pattern characteristics, and so on, we can identify the radar, compare it with known information, ascertain its range, location, use, and other essential information required to evaluate its capability as a radar and its susceptibility to countermeasures.

This same process of ELINT pertains to any and all enemy electronic devices including airborne intercept devices used by guided missiles, guided missile launchers, fighter aircraft, long-range and short-range navigational aids, ground controlled intercept height finders, anti-aircraft and aircraft fire control radar, blind bombing devices, electronic radiations emanating from scientific laboratories or production plants, and so on.

What do these radiated signals sound like? Frankly they sound like noise or radio static during a thunder storm — in fact, before the more euphonious term of ELINT was coined, the British called it "Noise Listening" and, during World War II, had a "Noise Listening Bureau."

Although ELINT is a very complex field — constantly looking beyond present knowledge of electronics to fulfill its role of providing timely information on new foreign electronic developments, it need not be pushed aside as too complicated to be understood. Because of its complexity, some members of the intelligence community are inclined to throw up their hands

and ignore this potential tool. However, ELINT is not too difficult to comprehend or use, nor is it an end in itself, but it can contribute essential, accurate information to the intelligence process.

Scientific intelligence and, in particular, ELINT, or electronic intelligence, had its start in England immediately before World War II. Early in 1939 the British Committee for the Scientific Study of Air Defense first drew attention to Britain's ignorance of new German weapons. One scientist, Dr. R. V. Jones, was appointed to look into the matter. Before he even started his task the war broke out and in June 1940, Dr. Jones, after considerable study, concluded that the Germans had developed a radio beam by which their bombers could operate over England regardless of weather, darkness, or cloud cover and still be most accurate in their blind bombing. This beam, just a little more than one-half mile wide, passed directly over London. Based on Dr. Jones' conclusion, steps were immediately taken to find any possible countermeasures. A Royal Air Force search aircraft was outfitted and it accomplished its mission of looking for and detecting this German beam. Technical analysis of this information provided the radio frequency and other characteristics of the beam, thus permitting the British to jam it and render it ineffective. Henceforth, many bombs intended for London fell harmlessly on the open countryside. This interception and analysis of an enemy electronic radiation (later known as Knicklbein) was the birth of present day ELINT. The Germans altered their beam system and soon began using a better system utilizing intersecting beams referred to as the "X" apparatus, which provided greater accuracy. These beams were at a different frequency than Knicklbein, requiring new search and analysis before the British solved this new threat and took countermeasures. With the "X" apparatus, the bomber flew along an electronic beam while its position along the beam was observed from a German radar station on the continent. When the bomber was over the target, it was told to drop its bombs. By now Britain's ELINT capability of intercepting and analyzing this electronic information was quite effective and continued to grow in scope and importance throughout the war.

During World War II the US made extensive use of electronic intercept devices in both the Pacific and European Theatres of

Operation. Special USAF and Navy planes equipped with ELINT receivers ferreted out the secrets of German and Japanese antiaircraft radar and aircraft warning devices. From the use of such planes the word "ferret" was coined, a term presently applied to aircraft equipped to investigate enemy electronic radiations. Among the most deadly weapons directed against the Eighth Air Force were the German antiaircraft guns which were equipped with extremely accurate radar directors known as "Wurzbergs." The close formations of American aircraft made a juicy target for the more than 16,000 German antiaircraft guns. By use of radar intercept equipment (ELINT equipment) information was obtained which permitted the use of jamming devices, and thus the one-billion dollar investment of the Germans in their Wurzberg radars was literally ruined by the countermeasures made possible through ELINT. Knowing we had this capability, the Germans began a frantic search for non-jammable radar equipment, but the war was over before they succeeded.

Following World War II there was a period in which interest in ELINT, as in many wartime activities, tapered off. Some effort continued but the real push to provide intelligence on electronic advancements in other countries was not initiated until the USSR clamped down its Iron Curtain. Since that time, the collection and analysis of electronic signals radiating behind the Curtain has been the constant goal of ELINT. Since the birth of ELINT in 1940 the effort has grown in size, cost, importance, complexity, coverage, and capability, and, like most scientific efforts, is making yesterday's limits, today's capabilities.

Electronic intercept, to use one connotation of ELINT, provides factual information. Unlike the collection of much intelligence information where we are forced to rely on word of mouth, memory, or integrity of source, electronic radiations are intercepted and recorded by machine. If a signal is being radiated it can be recorded and later reported accurately even by someone who doesn't understand all that he is doing. Because of this factual nature, ELINT has provided substantiation of many intelligence estimates based on other intelligence processes.

During World War II, Air Force B–24 aircraft and radar-equipped Navy Catalina aircraft were assigned the job of locating enemy radar in the Pacific. They spotted and pinpointed Japanese air warning sets scattered all the way from the Solomons to the China coast. A few days before the Leyte landing in October 1944 one of the ferrets discovered a new Japanese radar on Suluan Island at the mouth of the Leyte gulf. As this radar commanded the approaches to the Leyte coast line it was necessary to eliminate it and this was done on a commando raid by the US Rangers.

Currently, ELINT is providing the Strategic Air Command with the intelligence it requires on the location and range of Soviet radar. Through ELINT, information is acquired on the method, capability, and limitations of Soviet long-range navigation systems upon which their atomic bombers rely. Soviet missile tests are monitored by ELINT and the point may soon be reached where, by interception and analysis of the telemetering signal from Soviet missiles, we will acquire missile performance data vital to our National Intelligence Estimates. (Telemetering is the electronic system used in missile testing which records, codes, and transmits to ground test stations such things as missile speed, flight path, guidance, skin temperatures, and other behavior characteristics of the missile in flight.)

Since early in World War II the Army, Navy, and Air Force each have expended varying degrees of effort on ELINT, and in 1952 the Central Intelligence Agency entered the ELINT field. Although much of this individual endeavor was valuable, in 1954 better organization was given to ELINT — organization on a national level. The lack of proper dissemination of valuable intelligence produced by one organization but not always readily available to the others in the community was noted as a serious problem. When this situation came to the attention of the National Security Council a study was made, and National Security Council Intelligence Directive No. 17, entitled Electronic Intelligence (ELINT) was issued (in May 1955). NSCID–17 established the first national policy for ELINT and it is still the basic authority for the national ELINT program. It directed that:

a. The US Communications Intelligence Board (USCIB) shall be the national policy body for ELINT.

b. The Department of Defense and the Central Intelligence Agency shall be responsible for their respective ELINT collection activities.

c. The technical processing of all ELINT shall be accomplished in a jointly-staffed center administered by the Department of Defense.

d. All data collected by the collection agencies shall be made available to the National Technical Processing Center (NTPC).

e. The NTPC shall effect the fullest and most expeditious processing possible and furnish the results to the interested agencies.

The present national organization for ELINT is rather complex, with many interlocking organizations and many formal and informal coordinating committees. The important consideration is that each of the services and CIA is free to run its own collection operations designed to furnish information it alone requires, but is expected to submit all collected data to the NTPC subject only to the minimum delays necessitated by prior exploitation for urgent tactical or operational purposes. One can immediately see the strong vertical organization for ELINT within each major component. It should also be appreciated that much horizontal collaboration is being accomplished by joint participation in such organizations as the NTPC and AFOIN–Z in an effort to coordinate individual activities into a national ELINT program.

In October 1953 a study was made of ELINT in CIA. This resulted in the appointment of an Agency ELINT staff officer and in the preparation of an Agency ELINT program which the Director of Central Intelligence approved on 29 May 1954.

Within the Agency ELINT is organized generally as follows. The Office of Scientific Intelligence develops targets and requirements for ELINT collection, furnishes scientific and technical guidance to Agency collectors, and performs the technical analysis and collation of ELINT with all source material in the production of scientific intelligence. The Clandestine Services conducts a continuing review of the potential and capabilities for covert ELINT collection, implements specific clandestine activity in response to approved ELINT requirements, and coordinates US ELINT clandestine activities with foreign governments. The Office of Communications arranges for research, development, and procurement of ELINT equipment as required to support clandestine ELINT collection. The CIA ELINT Staff Officer advises the Deputy Director of Central Intelligence and appropriate operating components on the formulation, implementation, and coordination of ELINT plans, policies, and programs.

On the national level, much work has gone into summarizing what each organization requires in the way of information on enemy electronic developments. This sizeable task has resulted in a formal statement of the currently definable Specific ELINT Collection Requirements (SPECOR). This collection guide is based on the priority of the National Intelligence Objectives. It has been disseminated throughout the services and CIA field units for guidance as to what information the intelligence community requires and in what priority.

To realize the need for an adequate requirements system, consider that the ideal ELINT system is one capable of collecting all signals of interest and extracting all of the useful information from each signal. This is neither possible nor practicable, however. The questions of just what signals are of interest and just what information about them is needed must be answered in the light of the gaps in our intelligence. Thus, as in other branches of technical intelligence, ELINT is faced with the problem of relating scientific techniques to intelligence problems.

In general, ELINT targets fall into two major categories. The Army, Navy, and Air Force, charged with the military defense of our country, are primarily concerned with the location and capability of all enemy radar on a current basis. This is referred to as the Radar Order of Battle (ROB). The Air Force, for instance, must know where the heavy concentrations of enemy radar are so that its planes can either skirt the area or take proper countermeasures. The largest portion of intercepted enemy electronic information falls into this category of maintaining an adequate radar order of battle. CIA, on the other hand, is primarily interested in scientific break-through, or in not being surprised by new enemy electronic develop-

ments. This means that most ELINT effort is directed toward the interception and analysis of new and unusual electronic signals. Naturally in the course of searching for new and unusual signals, much order of battle information is received. This serves, in addition to supplementing the services operations, as a basis of comparison to determine what is new and unusual. The ELINT objectives of first priority to CIA relate to those signals which have yet to be intercepted or for which the radiating source has yet to be seen. Specifically, the targets are as follows:

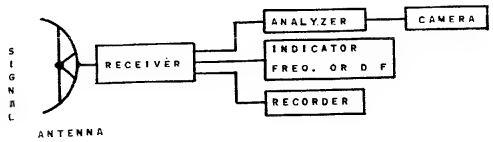
a. Those non-communication signals which are, or are suspected to be, associated with the Soviet or Satellite ability to deliver atomic or other weapons of destruction — that is, guidance or telemetry signals associated with missiles, airborne navigation, and bombing systems.

b. Those non-communication signals which are or are suspected to be associated with the Soviet or Satellite ability to defend their countries against the delivery of atomic or other weapons of destruction — that is, early warning, ground-control intercept, gap-filling radars, surface-to-air weapons systems, airborne weapons systems, ground surveillance systems, jammers, and so forth.

c. Those signals occupying an unusual portion of the radio frequency spectrum not normally associated with Soviet or Satellite equipment.

The equipment involved in ELINT is elaborate and complex. To make matters worse, the higher up the frequency spectrum you go the shorter your intercept range becomes, and the present trend toward higher frequencies means that ELINT equipment must get closer to the target or be designed with greater ranges, both of which approach the impossible.

ELINT equipment falls into two main catagories: collection equipment (airborne, maritime, fixed station, or agent-carried) and analysis equipment (used on the ground to reproduce, readout, and analyze the collected information). Basically, the major components of an ELINT collection system are the antenna, receiver, recorder, direction finder, and analyzer.



The antenna corresponds to the human ear. It is that component which first detects a signal. It is, of course, desirable that the antenna be very sensitive or, as we say in ELINT, have high antenna gain. This permits the maximum intercept range. The ideal antenna system would have the following characteristics:

a. a continuous and fixed broad area coverage,
b. very broad electronic spectrum coverage,
c. very high gain,
d. inherent capability for giving directional information.

These requirements are not all compatible. In practice it is necessary to compromise in order to gain a workable system. The decision as to which of the desirable characteristics can be safely compromised, and to what extent, is based on the frequency range of interest and also on the specific ELINT target under consideration. For instance, broad area coverage may be obtained by either of two means — a broad beam antenna fixed in space or a narrow beam, scanning antenna. The first method demands a sacrifice in gain. The second limits the time coverage of any part of the total area.

Following receipt of the signal by the antenna it is passed to a receiver. The function of the receiver is to convert transmitted information available at the antenna into a form that can be measured and recorded. Basically two general types of receivers are in use today — the superheterodyne and the crystal video. The operating characteristics of each receiver may be outlined as follows:

Superheterodyne — slow scan.
a. inherently high sensitivity,
b. good frequency resolution,

c. prohibitively long search time in many cases.

Crystal video — wide open.

a. low sensitivity reducing maximum probable range,

b. frequency resolution problems,

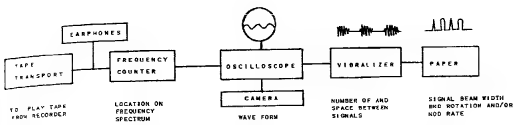
c. search time considerably less than the superheterodyne.

From the receiver the signal goes next to the recorder where the signal is stored on magnetic tape or wire. There are two main reasons for recording signals. A permanent record of the signal is required for future analysis and for records, and on signals of short duration or higher complexity the operator may not have enough time or capability to evaluate the signal parameters before the transmission is ended.

Direction-finding equipment is sometimes utilized during the interception of the signal. It displays incoming signals on an oscilloscope or other azimuth-reading device giving the direction of the arrival of the signal.

Analyzers in the ELINT collection system are sometimes used during interception to provide a preliminary observation of the type of modulation and to measure the repetition rate, duration, and general shape of signal pulses. Signals are usually presented by a cathode ray tube (similar to a television screen), which provides a moving picture of the shape, size, and nature of the incoming signal pulse or wave form. The pictures are usually photographed as a permanent record. It should be pointed out that ELINT collection devices need not be huge in size, as are those used in ground, sea, and some airborne operations. Quite to the contrary, considerable use is made of miniature equipment no larger than a book. ELINT collection equipment is usually designed for the specific situation involved, whether it be a 60-foot parabolic antenna on the ground or a tiny, unassuming, hand-carried package.

The major components of an ELINT analysis system vary greatly with the purpose of the analysis. Order-of-battle analysis is often done automatically by IBM-type equipment. The analysis that CIA performs is not for order of battle but is to identify new and unusual signals. For this, man-operated equipment is required and an analysis position contains at least



the following fundamental equipment: a tape transport used for duplicating or monitoring; a counter that measures and illustrates the modulation frequency; an ink-on-paper recorder to draw a continuous trace of the signal amplitude; an oscilloscope, which permits observation of the wave form; a vibralizer to display modulation frequency components versus time; filters to separate signals; a rapid-advance movie camera; and a host of other equipment to permit the analyst to scan great volumes of tape and film to separate that minute portion which, upon detailed analysis, may prove to be a new electronic development.

It is hoped that this basic discussion of ELINT will provide a general concept of this complex scientific intelligence process. It should be realized that in the interest of readability many points have been simplified and technical details omitted so as not to confuse the non-technical reader.

If one considers that one-third of the cost of a modern fighter aircraft goes for electronic equipment and that most of the electronic devices which make up this equipment radiate signals, then one begins to understand how much there is to learn of Soviet capabilities by examining their use of electronics. This also applies to ground and sea weapons, including missiles. Recent news reports of Soviet developments in the scientific field demonstrate how heavily the Russians are relying on electronics and how advanced their development is. The Soviet earth satellites with their radiated signals are a responsibility of ELINT. ELINT must continue to intercept and to analyze Soviet electromagnetic emissions preferably in the research and development stages in order to keep abreast of Soviet electronic advancements and to attempt to predict future capabilities.

REPORT ON HUNGARIAN REFUGEES

Guy E. Coriden

The Hungarian Revolution of October 1956 provided an unprecedented opportunity for the collection of intelligence on a Soviet Bloc country. Each of the many facets of intelligence activity played its role. Every known Free World and Bloc intelligence organization was involved. Every Hungarian refugee who could toddle was a potential target for an intelligence-minded group. It is obviously impossible, therefore, to claim with good conscience to tell the "intelligence story" of the Hungarian Revolution. It is also impossible to get the many participants to agree on which of the many efforts was the most fruitful. This, then, will be the account of one activity — the collection of the intelligence information and material from the Hungarians who were admitted to the US. Other operations will be mentioned only as they are considered pertinent. Because the opportunity was unique, certain adaptations in intelligence collection methods were required to take full advantage of it. The object was to extract the maximum amount of intelligence at a minimum cost while still abiding by decent rules of human conduct. As the methods used were necessarily determined by the processing and resettlement procedures as well as by the official US Government attitude toward intelligence exploitation, it might be well to begin with a brief historical background.

The story of the revolution has been told many times, probably best by the UN in its massive report. The outbreak took place on 23 October 1956, and in the months following, it is estimated that 188,000 Hungarians found refuge in Austria and 18,000 in Yugoslavia. As of 1 September 1957, approximately 35,000 of these refugees had accepted asylum in the US.

In early November 1956, when it became apparent that a massive influx of Hungarians was going to have to be resettled, it was decided that Camp Kilmer, New Jersey, would be the processing center for all of the refugees. Because the installation was an Army camp, the Army was charged with the initial responsibility for coordinating the resettlement effort and providing all of the housekeeping services. On 12 December 1956,

however, the President appointed a civilian Committee for Hungarian Refugee Relief under the chairmanship of Mr. Tracey F. Voorhees. This Committee has coordinated all activities in connection with "Operation Mercy." In the process it utilized the services of more than 20 volunteer and governmental agencies. From the arrival of the first refugees on 21 November 1956 until early May 1957, when Camp Kilmer was closed, transportation was provided by 214 MATS flights, 5 Military Sea Transport Service (MSTS) ocean voyages, and 133 flights chartered by the Intergovernmental Committee for European Migration (ICEM). The Bureau of Immigration and Naturalization and the Public Health Service performed the functions necessary for admitting aliens to the US, and various charitable-religious agencies arranged for most of the resettlements. Part of the job of fitting the individual's skills to available employment opportunities was performed by the National Academy of Sciences and the US Employment Service. The processing and resettlement was handled with an amazing degree of efficiency, and the sympathetic attitude of the American people was so sustained that by early May it was possible to close Camp Kilmer. About 32,000 of the refugees had been dispersed to various parts of the country, and those remaining are being shuttled through the St. George Hotel in Brooklyn.

Lest the cursory nature of this account convey the idea that this was a simple and smooth process, remember that the operation involved the complete transplanting to the US of a large number of participants in a violent revolution who had lost most of their possessions and who had little or no knowledge of the English language. Only 6,500 of these could come under any available immigration quota. The rest were admitted under the Attorney General's discretionary authority, and the rules were established and changed several times. Indeed, methods and procedures were developed, abandoned, and reinstituted many times in the early days of the operation. Also the prevailing attitudes, both official and public, changed appreciably over the months. In the early days the primary concern was to provide a humanitarian welcome for the victimized Hungarian people. Every effort was made to avoid incidents which might cause unfavorable comment. This attitude was motivated by a genuine sympathy and admiration for the Hungarians and a determination to take full advantage of

the propaganda opportunity against the Soviet Bloc. As the spotlight of international interest turned elsewhere, concern for internal security and the collection of material bearing on motivations came to the fore.

A few statistics may help to give some idea of the scope of both the intelligence collection problem and the opportunities. Hungary is a nation with a population roughly equal to that of Pennsylvania and a land area just slightly smaller than that of Indiana. About 65 percent of the population was considered to be rural, and 16 percent was concentrated in Budapest and its environs. The 188,000 people who fled the country during the great exodus represented about 2 percent of the population. No age distribution is readily available for prerevolutionary Hungary, but 83 percent of the refugees received into the US were under 40 years of age, and approximately 64 percent of them were males. This is certainly not a typical slice from an old country in a near postwar period. Also despite the fact that Hungary is predominately rural, less than 1 percent of the group coming to the US admitted to being engaged in agricultural enterprises. This is probably easily explained on two counts: first, the land owners, even collective farmers, are less likely to leave than the landless; and second, those of rural background, faced with new opportunities and feeling that they have little prospect of owning land in the new country, are likely to follow the prevailing trend toward city occupations, even to the extent of falsifying their background statements. Another survey of the refugees who were over 16 years of age (excluding housewives) revealed that the average education of the group coming to the US was almost 10 years.

The fact that the refugees were young, well educated, male, and engaged primarily in nonagricultural enterprises is a happy one when we think of the group both as a national asset and as a positive foreign intelligence target. The additional fact that this predominately urban group formed about 1 percent of the total population of a small agricultural country should mean that not only every trade and industry but every major enterprise should be represented by a delegate in the US group. It is well recognized that a certain number of the Hungarians probably succumbed to the human tendency to exaggerate and alter their backgrounds, but it is believed that the distortion is not significant for our purposes.

In November 1956 the intelligence community faced the problem of exploiting the Hungarians without the benefit of even the crude statistics presented in this article. The known facts were that tens of thousands of Hungarians were crossing the border to seek refuge in the Free World. Some were sincere patriots who had jeopardized their lives for their country in the revolution; some were opportunists seeking economic betterment; and some were intelligence agents with missions to collect intelligence, to establish nets or to report on the activities of Hungarians in the first two categories. Austria found its border area inundated with the Hungarians and could not screen them thoroughly with the resources at its disposal. At the same time the Austrian government did not wish to provoke the Soviet Union by allowing other Western nations to set up obvious intelligence procedures as a first step in the resettlement process. A number of the refugees were willing and even anxious to impart information of value to the Western powers, both for patriotic reasons and in order to secure more favorable treatment. The more enterprising of these found their way to one or another of the overt US or UK missions operating in Austria. Reports coming back from these missions were the first indications of the high caliber, intelligence-wise, of the refugee horde. It was impossible to begin the problem of cataloguing the intelligence assets in Austria, so the next best thing seemed to be an attack on the same problem in the US. The NSCID #7 Committee has the responsibility for domestic exploitation. It was now faced with the problem of exploiting a large, but indefinite number of sources without any prospect of additional manpower to meet the vastly increased workload.

In casting about for a solution to such an undertaking, the training cadre of the Armed Services Prisoner Intelligence Committee (ASPIC) seemed best fitted for the mission in terms of qualifications and availability. This was an Army-Navy-Air Force-CIA unit which, in time of war, could be expanded to deal with certain aspects of the prisoner interrogation problem. At the time of the Hungarian eruption it consisted of a group of intelligence language experts furnished by the Army and Air Force as a basic cadre. Under the auspices of the NSCID #7 committee, advanced units of ASPIC were sent to Camp Kilmer in December to establish a process for assessing the intelligence

value of the refugees, in preparation for a full exploitation. At this time the prevailing sentiment among those responsible for "Operation Mercy" was a desire to extend undiluted Western hospitality to the Hungarians. At this early stage there was an attitude of mild horror toward any intelligence activity. The advanced unit found it necessary, therefore, to act under a cover — the Historical and Statistical Survey Team (HSS). The activity of the unit was restricted to obtaining background information on the individual Hungarians and collecting such documents and possessions as could be pried loose without creating a furor. Through its own efforts and with the cooperation of the authorities who were processing the Hungarians, HSS was given ready access to the information which was available to all processing authorities. This information generally consisted of name, place of birth, former occupation, military service, and, in some cases, education and language capabilities. Because of language difficulties and a normal human desire to describe one's background in the best light, the education and occupation data were of limited value. With the permission of the authorities a certain number of the refugees were selected for extended interviews. Here again the prevailing sentiment toward humanitarianism, the complications of processing the many homeless, confused people in a humane and overt way presented an amazing number of difficulties for the surveying teams. Refugees were difficult to locate, suspicious, or overly garrulous. The intelligence operation was at the low end of the priority scale at the camp. There was inclement weather, a complicated system of drawing meal tickets, and the usual spate of unsettling rumors. Methods were developed by HSS on one day, altered the next, and discarded on the third day — all in response to the changing conditions and reactions. On the basis of the original inadequate information, about 6,000 refugees were selected for their intelligence potential and were asked to submit to an initial interview. Of these, about 3,600 complied with the request, and slightly more than 2,000 proved to have sufficient potential to justify recording a Preliminary Interrogation Report (PIR). These ranged from scientists or ministerial officials with detailed knowledge of intra-Bloc operations to private soldiers with knowledge of troop and supply locations in one limited area.

After it became apparent that the refugee flow was no longer the primary news topic in the country, it was decided that an effort would be made to carry on a more intensive intelligence collection effort at Camp Kilmer. This decision was based on the fact that an operation carried on there would catch the refugees before they became involved in the problems of adjusting to living conditions in their new environment and would entail much smaller cost to the US intelligence services. The fact that an individual's memory of a situation does not improve with the passage of time was also a primary factor in this decision.

There was, of course, much thought given to the method for securing full cooperation of the refugees within the framework of the humanitarian effort. The refugees were usually willing and eager to impart all possible information. The common sense things were generally most efficacious in getting the cooperation. An interviewer competent in the refugee's field generally established satisfactory rapport rapidly. Cordiality, creature comforts, and a symbol of US Government officialdom were helpful. For instance, invitations carrying a large official looking stamp secured far better results than those merely stating that the US desired that the refugee report to a particular building. The air of uncertainty was also valuable. The refugees who were contacted soon after arrival were easier to work with than those who were around long enough to learn that they were safe and could extract favors in return for services or information. When the refugee reached his destination and was integrated in a community, protective relatives and friends frequently became a barrier or encouraged a suspicious attitude. Simply stated, the refugee, like a bewildered child in an unfamiliar situation, responds best to a friendly, solid person who understands him. As he becomes wise to the way of the new world these psychological factors favoring cooperation disappear. Then each case takes on more individuality and the treatment which has placed the refugee in this specific situation is the important thing to look into for any needed lever to cooperation.

It was decided that to take advantage of the situation the intensive intelligence exploitations should be carried out by a second interagency group with the cover name of US Sociological and Technical Research Unit (USSTRU). This unit was

activated on 10 January 1957. While maintaining some semblance of separate operations, HSS and USSTRU cooperated fully; and when conditions permitted, sources were shuttled from one to the other. About ninety different individuals from CIA, comparable numbers from the Army and the Air Force, and a few from Navy and State participated in the USSTRU operation. No large portion of the group was there at any one time — the ceiling at the peak of the operations was about 60 persons from all participating agencies. Because in the case of USSTRU the most effective collection could be done by analysts and intelligence officers having knowledge of the particular areas covered and gaps to be filled, specialists from all parts of the intelligence community were rotated to Camp Kilmer for time periods varying from a few days to several weeks. Members of both intelligence units operated with a degree of dedication comparable to that shown by the people engaged in the processing and settling of Hungarians. For most of the period the work week consisted of seven 12- to 14-hour days.

Although the constant flow of experts through the intelligence operating units provided the best qualified interviewers, they also created continuing problems. The light cover required a certain degree of caution which was difficult to maintain under the circumstances. This mass participation method, however, had the added advantage of acquainting the whole intelligence community with the potential of the Hungarian refugees and the problems involved in exploiting this potential. Many of the large number of analysts involved were given their first experience in interviewing a source through the use of an interpreter and in reporting on information in which they were not expert. We have introduced the problem of interpreters, and this might be the place to say that early in the game two language factors came to light: (a) the intelligence community probably has fewer language specialists in Hungarian than in any other but the most exotic Eastern and Near Eastern languages, and (b) the Hungarians have a lower coefficient of second-language competence than any other civilized population except Americans. The shortage of competent Hungarian translators was a limiting factor in the size of the operation throughout its existence. Those who did come forward were used for long periods of time and were released only with great

reluctance. Despite this serious handicap, USSTRU, from its inception to its demise on 1 May, produced about 1,500 intelligence reports covering all fields of interest. Hundreds of documents with accompanying stories, books, and other articles of possible future operational usefulness also were acquired.

The record keeping for the Hungarians was undertaken by CIA, under its responsibility for the exploitation of all private sources in the US. Because many of the sources were not available for any sort of an interview at the camp, many had their interviews shortened by resettlement opportunities; and because qualified experts were not available in all fields at all times, it was necessary to compile full records on the sources so that they might be located at a later date. Because of the confusion inherently attending the whole program, the job of compiling the records involved scooping up all available piles of paper not only from the intelligence components but also from all of the agencies participating in the resettlement program. Then followed many hours of coding, recording, sorting, discarding, and requesting bits and pieces of data to fill the gaps. The resulting compilation proved of great use not only to all components of the intelligence community but, also on a number of occasions, to other Government agencies. By utilizing these records and its complete field force, supplemented by Air Force and Army units, CIA produced almost 3,000 reports by 1 September and has many more to come. This part of the collection operation faced many of the difficulties encountered at Camp Kilmer, with some new ones added.

Principal among these was the fact that the Hungarians, finding themselves free to move about as they pleased, changed locations with amazing frequency and rapidity without bothering in many cases to comply with the US regulations which require that aliens register changes of address with the Bureau of Immigration and Naturalization. Many field collectors had the disillusioning experience of tracing a Hungarian refugee believed to have potential for giving worthwhile information only to find after knocking on many doors that the source had considerably overstated his experience and qualifications.

The total result of the effort seemed to be that the overwhelming majority of the gaps in intelligence information on prerevolutionary Hungary were filled. When the intelligence analysts are able to collate and digest the mountain of information resulting from the program, the records and facilities available should enable the collectors to fill all but a minuscule number of gaps. In addition the many intelligence officers who participated in the interviewing gained not only experience in the techniques involved but also a certain area familiarity. It would be impossible for an interested, informed person to talk to about forty or fifty Hungarians from all walks of life for a total of about 200 hours without acquiring a useful knowledge of the country and the people. When you add the thousands of reports and items to the training and area familiarization and divide it by the cost (Army food and quarters were provided, and no additional personnel were hired) you find that the intelligence community has made a bargain purchase. The Hungarian exploitation effort, American domestic style, will be a source of example and anecdote for some time to come.

PAPER MILLS AND FABRICATION

Stephen M. Arness

The paper mill and fabrication problem has appeared in many forms including outright fabrication, the sale of pseudo-intelligence, false confirmation, and multiple distribution of both valid and false information, as well as organized deception by foreign governments.

US intelligence agencies as well as all Free World intelligence agencies have been flooded with such information. It was estimated in 1952 that more than half of all the material received on several countries of greatest intelligence interest fell into these categories. US estimates were thus endangered and American intelligence efforts have been needlessly dissipated.

Multiple dissemination by paper mills operated by exiles from the Soviet Bloc cuts particularly deeply into the professional manpower resources of all agencies. Working independently of each other, American intelligence agencies were slow in developing a mechanism for benefiting methodically from their common experience in order to remedy this situation.

Paper mills are defined as intelligence sources whose chief aim is the maximum dissemination of their product. Their purpose is usually to promote special emigre-political causes while incidentally financing emigre-political organizations. The information thus conveyed consists of a mixture of valid information, overt material, propaganda, and fabrication. Its bulk, form, and obscure origin frequently preclude successful analysis and evaluation.

Fabricators are individuals or groups who, without genuine agent resources, invent their information or inflate it on the basis of overt news for personal gain or a political purpose.

The line between the two categories, in many cases, is difficult to draw.

Competent fabrication has defied recognition on the part of analysts and evaluators. Well-planned deception or provocation is apt to prove undetectable by analytical processes. It cannot be assumed, therefore, that more than a fraction of the number of actually existing cases in these categories have been identified. The established professional competence of the

Soviet intelligence services coupled with their known preoccupation with deception and provocation — or, as they term it, "disinformation" — forcibly points up the danger which paper mills and fabricators represent to the US intelligence community.

This essay is primarily intended to call attention to the nature of this danger and to suggest the necessity of remedial action which may in time make the deception weapon less effective in the hands of the adversary and reduce his opportunity for employing it.

US intelligence-gathering agencies have spared neither manpower nor funds to close the gap between their information requirements and their knowledge of the Soviet Bloc. Groups of exiles from all target countries recognized very early that this situation offered them vast opportunities for political and personal advantage. Their intelligence representatives were well aware of the multiplicity of American agencies uncritically accepting all information offered, and even outbidding one another for intelligence sources. Moreover, their own experience often proved to them that American agencies did not fully coordinate their efforts, nor effectively cooperate to expose fraud.

Satellite politicians in exile knew that they could not return to power in their homelands except in the wake of war and Western victory. The liberal monetary remuneration offered by Western intelligence agencies for information from behind the Iron Curtain offered them a ready-made opportunity to remain alive and to preserve a political organization by peddling alleged intelligence. Careful operational analysis demonstrated that few, if any, emigre organizations had valid and unique intelligence assets; they lacked primarily the technical communications and documentation facilities for continuous contact with the homeland. Despite this, the unfortunate fiction persisted that such organizations had undefined special means of obtaining intelligence.

In many cases exile leaders neither understood nor respected the basic premise of US policy not to engage in war unless attacked. Their "intelligence" production, true, embroidered, or false, was inevitably used to influence US policy in the direction of hostility to the Soviet Bloc and to satisfy the ambitions of political pressure groups.

To state the obvious: each exile group, as each sovereign country, used the weapons at its command in its self-interest, enlightened or otherwise. Emigre groups considered intelligence production a weapon to be so used. Yet the record of US dealings with them shows that in case after case it ignored the fact that the satisfaction of US intelligence needs was clearly secondary to their own political interests. One effect of the cry-wolf policy on the part of the emigres and the recognition of their efforts to mislead is that one of their reports may be ignored.

Immediately after the war, several exile groups had manpower assets behind the Iron Curtain. Hasty, uncoordinated, and totally insecure operational use of these assets by both emigre groups and Free World intelligence agencies permitted the Communist security services to identify and destroy or to use them. Initial failure in the West to recognize the ruthlessness and efficacy of the Soviet-type police state contributed to this process which, generally speaking, was completed by 1950.

In view of this, it became apparent that nothing could be achieved by further uncontrolled subsidies to exile groups. Assertion of operational control by US intelligence officers through financial or other means, it could be expected, would normally be resented and sabotaged by such groups as it would strike at the roots of their political purposes. Generally, it was found advisable not to deal exclusively with the political leadership, but to take advantage of dissidence within the groups and to make it plain that intelligence production on our terms was valued more highly than the leaders' political cooperation. The leaders, finding personal control of their groups effectively endangered, then were apt to come to terms.

This strategy was followed increasingly in those operations involving Satellite exile groups with which CIA had contact. However, unless all intelligence agencies also recognize these principles and effectively suppress extraneous, uncoordinated aid to these groups, the uncontrolled information-peddling pattern will certainly persist or recur.

The fact that substantial funds for intelligence procurement have been available to numerous agencies may actually be a handicap. Exile groups and individual intelligence peddlers

assume that cost is no object to US intelligence personnel. Innumerable instances are on record in which payment for both good and bad information was wholly out of proportion to its true value. US financial liberality and competitive bidding among agencies has led to inflation in the intelligence market. Quality intelligence is seldom to be found in pieces of paper upon which a peddler has placed a price tag.

Virtually all outright fabrication cases can be attributed primarily to disregard for factors such as the following:

a. Control of agents should include their direct financial dependence upon the intelligence officers handling them.

b. Salaries of agents and sub-agents should be based upon sound estimates of actual living costs in indigenous terms, and exceed these only moderately. Excessive personal compensation, particularly when it is used to encourage volume of production, is a common cause of padding and fabrication.

c. A portion of the agents' earnings should be withheld in special blocked accounts until their services are satisfactorily completed.

d. Unless the use of funds available to agents for operational expenditures is closely controlled, security breaches or the purchase of embroidered and fabricated material will result.

e. Subsidies to foreign intelligence services and groups must be carefully watched to prevent financing by them of recognized paper mill operators and fabricators.

US intelligence agencies abroad have reacted in various ways to the problem of uncoordinated spending on intelligence procurement, provided they were aware of it. Local coordination on a varying scale has taken place spontaneously in some areas. In the past some CIA field stations, concentrating their available manpower on procuring good information, paid no attention to US competitors in the field; others treated the problem as one of counterespionage. For the most part, however, efforts have been made to establish the origin of all information from the area, regardless of the agency purchasing it. In some instances the attendant waste of professional manpower overseas has been prodigious. It is estimated, for example, that one-third of CIA's intelligence officers in Austria were committed during June 1951 to the detection and neutralization of fabricators and paper mills.

The Communist concept of intelligence operations, patterned on the Soviet model, embraces a much broader field than does the Anglo-American. Far from being limited to seeking information through clandestine operations, it includes within the scope of "state security" a great variety of tasks designed to maintain the Communist Party in power and suppress all opposition. This means that all activity which can be construed as even critical of the state becomes a priority intelligence target.

The Communist security services accordingly make every effort to penetrate and control emigre movements abroad which may endanger their regime. This is not a difficult task. Emigre groups have operated openly in the West with little regard for security, and normally have admitted as members anyone who voices his anti-Communism strongly enough to be heard and who cannot be positively identified as a Communist agent. These two facts — that penetration and control of the opposition abroad are among the most important Soviet and Satellite intelligence tasks, and that they are so easily accomplished — lead to the assumption that emigre groups can keep only few secrets from the Soviet and Satellite governments, and that Soviet and Satellite agents may be high in the councils of such organizations.

There can be no reasonable doubt, furthermore, that Soviet and Satellite intelligence services have had the same easy access to the bulk of the emigre "intelligence" product as we do. It follows that Soviet intelligence analysts are apt to have a grasp of the extent of US information on the Soviet Bloc procured from such sources. They are thus able to base their deception planning on a thorough knowledge both of US intelligence procurement methods through exile groups and of much of the information in US hands against which deception is likely to be checked.

The lengths to which the Soviet Government will go in keeping track of emigre activities can best be illustrated by an historic case. During the nineteen twenties and thirties, in France, Soviet Intelligence obtained control of the Ligne Interieure, an "elite secret group" within the strongest Russian emigre organization of the day, the General Russian Military Union (ROVS). The Ligne Interieure had been designed by the ROVS for the centralization and political control of Rus-

sian emigre groups, especially those of military usefulness. This aim naturally appealed to most White Russian emigres; however, since the Ligne Interieure was under Soviet control, it simultaneously served the purpose of making virtually the whole White Russian emigration subject to Soviet inspection and manipulation. In 1935 this Soviet control was exposed when the head of the Ligne Interieure, the Soviet agent General Skoblin, was discovered to have organized the kidnapping of General Yevgeni Miller, then head of the ROVS. His intention had been to replace Miller with a Soviet-controlled substitute. In subsequent investigations the background of the Soviet conspiracy outlined above was uncovered in detail.

These considerations should not lead to an automatic assumption that information received from emigre groups is planned Soviet deception or provocation. In most cases there is no substantial evidence that the originators of fabrication were, or are, agents of the Soviets, that the material has been supplied to them by Soviet intelligence, or that it constitutes Soviet deception. On the other hand, it is known that the Soviets are masters of deception and provocation and are willing to accept extraordinary sacrifices in terms of true information passed, in order to make deception stick at the proper moment. This leads to the conclusion that the Soviets may be using the present to digest their information and to develop potential deception channels and materials, reserving deception operations for moments and circumstances of their own choosing.

The theory that analysts in Washington are in a position to detect deception or fabrication rests on the assumption that they have verified material at hand against which they can measure their reports. Under the pressure of the volume of invalid material they must process, with little verified "control" material to go by, evaluators must rely on their personal skill and instinct. Their judgment is thus increasingly subject to human error. On the whole, analysis alone, whether on a high or low level in US intelligence, has been unable to break fabrication or deception cases except when the material lacked quality. Evaluators are handicapped not only by their ignorance of the operational circumstances under which the information is procured, but by the amount of processing and re-processing to which it is subjected before it reaches them. Translations,

revisions, and summaries of spurious information frequently eliminate the flaws which might allow an analyst to detect a fraud in the original. It is the lesson of experience that fabrication and multiple false confirmation can be detected only by the method of operational investigation of the source and transmission channels, combined with reports analysis.

There can be no doubt that the Soviets are fully capable of planting information in our intelligence channels which has all the earmarks of being genuine. Only by careful scrutiny and cross-checking of the channels through which such deception material has been forwarded can the danger be reduced.

Unfortunately the following doctrines, which are fallacious and detrimental to the US intelligence effort, are still widespread among intelligence personnel:

a. That intelligence agents of all nationalities are entitled to keep secret from their US intelligence officers the identities, antecedents, methods of operation, and means of access to information produced, of their subsources.

b. That it is the mission of intelligence officers in the field to procure information without a determined attempt to ascertain its origin, leaving it to the experts in Washington to judge its validity.

c. That overseas sources are in danger of compromise if identities are revealed to other agencies of the US Government which were established, trained, and equipped to protect such information properly.

The last mentioned concept fostered resistance among intelligence officers of various government agencies which prevented a long overdue exchange of information on fabricators and paper mills. As a result, an excessive amount of professional manpower had to be devoted to costly overseas investigation, where simple headquarters coordination of suspect sources would have revealed duplication or fraud.

The steady concentration of US intelligence agencies on military targets in the Soviet Bloc, and the relatively small influx after 1946 of knowledgeable new sources, have tended to solidify the intelligence market. Since 1946, in many areas, agencies of the Government have been dealing with identical intelligence sources. This makes a systematic program of centralized registration of sources both necessary and profitable.

Editor's Note

The views developed in this paper were first expressed early in 1952 when the menace to the intelligence community presented by paper peddlers of various types was at its height.

Since then steps taken under the authority of the IAC give promise of achieving a coordinated solution to this problem by the US intelligence community.

LOST ORDER, LOST CAUSE

C. Bowie Millican, Robert M. Gelman, and Thomas A. Stanhope

The month of September 1862 began as the low point of the American Civil War for the North. The South, having repeatedly proved its superiority on the field of battle, was demonstrating a spirit of resistance which boded at least an ultimate stalemate and the separation of the former United States into two rival nations. Before the month of September ended, the eventual defeat of the South became inevitable.

In August, Robert E. Lee had smashed and routed the Federal forces under John Pope at the Second Battle of Bull Run,[1] leaving a legacy of hysteria to the Federal Government. Henry W. Halleck, the recently appointed general-in-chief in command of all army operations, was stunned by the suddenness and magnitude of the defeat. Edwin M. Stanton, Secretary of War, was busy with nervous preparations for the fall of Washington. To prevent arms and ammunition from falling into the hands of the enemy, he gave orders to ship the arsenal to New York. In the War Department, important papers were placed in bundles which could be carried by men on foot or on horseback. Gunboats were ordered to stand by on the Potomac River, and a steamer was held in readiness to evacuate President Abraham Lincoln and his Cabinet.

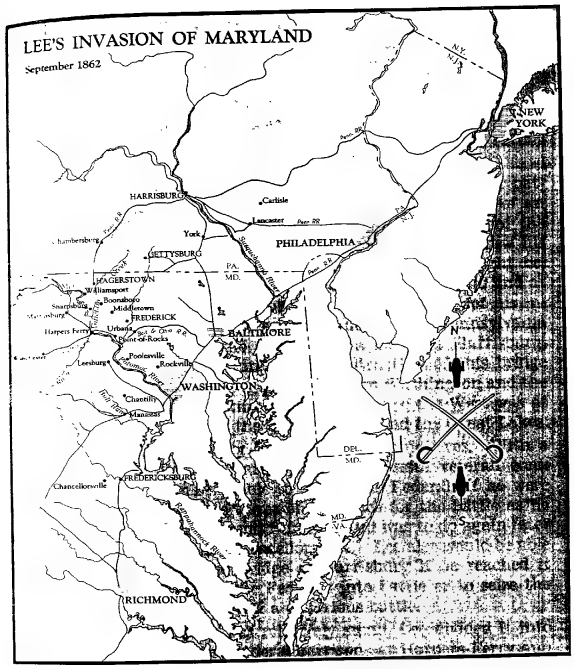
Other areas of the United States, although not under the guns of Lee's army, were no less apprehensive than the capital. In eastern Pennsylvania, Governor Andrew Gregg Curtin begged President Lincoln for a minimum of 80,000 troops to defend Philadelphia against the 120,000 to 190,000 rebels which he believed were being massed in Maryland for an invasion of Pennsylvania. In western Pennsylvania, there were fears that Braxton Bragg somehow was going to take his western Confederate army across impassable mountains to join with Lee. In Maryland, where memories of the April 1861 riots in Baltimore against Federal soldiers were still clear and bitter, there was widespread apprehension of a rebel uprising attended by the loss of the state and the isolation of Washington.

[1] Important places in the eastern United States mentioned in the text are shown on the accompanying map.

In New York and Indiana, potential Copperhead plots and sabotage terrorized both official and public opinion. Confederate armies in Kentucky under Bragg had taken Lexington and were threatening Louisville and Cincinnati, where martial law was proclaimed. In each of these places the citizens dug trenches and slept in terror when they did not actually flee to the countryside. A third major Confederate army under Earl Van Dorn, somewhere in Mississippi, conjured up additional nightmares for the frightened, who visualized this army sweeping through or around Ulysses S. Grant and eventually overrunning the western areas of the Union.

Among the European powers, sentiment was building toward mediation in the war and recognition of the Confederacy, if not toward actual intervention on its behalf. The British were provoked to these attitudes by the shortage of cotton for their textile mills, resulting in unemployment and deprivation for hundreds of thousands of workers; by a preference of the British nobility for the aristocratic, Anglo-Saxon South over the heterogeneous, "mongrelized" North; by the desire of the British Government to see two rival pygmies instead of a single united giant on the Canadian frontier; and by general national anger toward supposedly hostile Northern actions such as the blockade and the removal by a Yankee warship of two Confederate agents from a British mail steamer, the *Trent*. Subtle propaganda by Confederate agents in Great Britain provided a catalyst for these sentiments, and the rout of the Federal troops at Second Bull Run fired the retort. Recognition of the Confederacy by Her Majesty's Government and a negotiated peace on the basis of Southern independence loomed as a startling reality to the North in the shambles of its defeated army. Britain would have been followed by Napoleon III of France, who had the assurance of Confederate support and eventual recognition of any French conquests in Mexico in return for his recognition of the Confederacy — which had, in effect, already repudiated the Monroe Doctrine.

The South responded to news of the great victory at Second Bull Run with a demand that the war now be carried into Yankee territory. Newspapers in every Southern city spoke for their readers when they clamored for an immediate invasion of the North. Sentiments similar to those stirring the average Southern citizen also motivated the leaders of the Confederacy.



Lee agreed that Southern military success had put the Confederacy in a position to state its political objectives leading to an honorable peace, but he still felt that one more victory over the Federal troops — and this one a victory north of the Potomac — would so clearly prove the strength of the Confederate position that the North must accede to any demand for peace. Such a victory might well affect the coming Congressional elections in the North as well as influence the wavering British and French Governments to recognize Southern independence. An offer of peace after a great victory would be considered a magnanimous gesture by a victorious power rather than a sign of weakness by a frightened bureaucracy.

To achieve these political ends, Lee had to gain another battlefield victory over the Federals, and a major objective of an invasion of the North was therefore the Federal Army of the Potomac itself. By taking the initiative, Lee could draw his opponents, far less skillful than he, whoever they might be, into a war of maneuver in which he could win on a field and at a time of his choosing. As another major objective of his invasion, Lee also intended to seize or to destroy the Pennsylvania Railroad bridge over the Susquehanna River at Harrisburg, Pennsylvania. The seizure or the destruction of this bridge would sever the connecting artery between Washington and the West. The only other through connection to the West was at the periphery by way of the Hudson River and the Great Lakes.

Lee had the capability of attaining his objectives. With a victorious, battle-tested army under successful veteran commanders, Lee would be able to defeat the Federals if he were permitted to select the terms of reference for the battle as he already had done at Second Bull Run and was to do again later at Fredericksburg and Chancellorsville. Lee also would be able to destroy the railroad bridge at Harrisburg if he reached it without having drawn the Federals into battle or to seize the bridge if he reached it after a victorious battle.

Although his army was relatively small, Lee divided it into several parts, with the Federal garrisons at Harpers Ferry and Martinsburg in the Shenandoah Valley as targets for three units. Two other units were to proceed toward Boonsboro and Hagerstown. In his Special Orders 191 of 9 September 1862, Lee drew up his order of march and made his troop dispositions. Each of the key commanders mentioned in the order was sent

a copy of the order. James ("Pete") Longstreet carefully read his copy and chewed it — "as some persons use a little cut of tobacco." John G. Walker pinned his copy to the inside of his jacket. Thomas J. ("Stonewall") Jackson meticulously burned his copy.

There was a certain confusion in Jackson's mind as to whether Daniel Harvey Hill was still under his command or directly under Lee. To be certain that Hill received a copy of Special Orders 191 (the Army of Northern Virginia had not yet been divided into corps), Jackson, in his own hand, sent Hill a copy. Hill admitted receiving this copy. Unfortunately, Lee, considering Hill no longer under Jackson but directly under himself, also sent Hill a copy. Hill claimed that he never received this copy.

On Saturday, 13 September, the hastily reorganized Federal Army of the Potomac under the command of George B. McClellan moved into Frederick and set up camp on the outskirts of the town. Colonel Silas Colgrove, the commander of the 27th Indiana Volunteers, Third Brigade, First Division, Twelfth Army Corps, ordered his men to stack arms in the same area which had previously been occupied by the men under the command of Daniel Harvey Hill.

While resting in this area, Private Barton W. Mitchell and Sergeant John M. Bloss, both of the 27th Indiana, found a copy of Lee's Special Orders 191 in a paper wrapped around three cigars. The order was authenticated by Colonel Samuel E. Pitman, First Division Adjutant-General, who recognized the signature of Lee's Assistant Adjutant-General as that of Colonel Robert H. Chilton, with whom Pitman had served in Detroit. The order then was brought to McClellan, who set off to destroy Lee in detail.

McClellan, dilatory by nature and convinced by his faulty intelligence that Lee had an army about 50 percent larger than the Army of the Potomac, was not likely to have attacked Lee. Even with Lee's orders before him — orders dividing Lee's army — McClellan inched cautiously forward.

Lee, informed of the loss of the copy of Special Orders 191 that he had sent to Daniel Harvey Hill, did his best to reassemble quickly his scattered units to present a united front to the Federals, and on Wednesday, 17 September 1862, the Battle of Antietam took place. Lee, forced to fight on the defensive for

the first time during the war and incapable of maneuver, was able to stop the Federal attack only with great difficulty. On 19 September, Lee withdrew into Virginia, and the North was free of the invader.

The railroad bridge at Harrisburg was not cut, and the North was able to maintain its fundamental east-west link. Maryland, eager to follow a winner, not only did not secede but even went so far as to increase its effort on behalf of the Union. With Maryland remaining loyal, Washington was neither surrounded nor isolated, and its Fifth Column remained nervously underground. The fear of invasion among Northern states proved to be groundless, and the governors of these states rather than demanding troops from Washington to defend themselves, provided troops, albeit reluctantly, to the Union army. With substantial reinforcements from the eastern states available, the Union was able to send Western recruits to Don Carlos Buell and Grant to exploit their victories at Perryville, Kentucky, and at Corinth, Mississippi.

The Copperhead movement, which needed the impetus that a Southern victory north of the Potomac could give, never received this impetus and gradually lost strength as the war progressed. Even at the polls this movement proved to be weak as Lincoln's Republicans swept the Congressional elections of 1862 to remain in power.

Lincoln, who had resolved upon the Emancipation Proclamation as a military, political, and psychological measure necessary to insure the ultimate conquest of the Confederacy by the Union, leaped upon Antietam as the victory which he needed to give meaning to the Proclamation. Even though the Proclamation was a political gesture, in victory it seemed more idealistic — and realistic — than if it had followed a defeat on Northern territory. After a Union defeat the Proclamation would have seemed to be nothing more than the empty oratory of a beaten demagogue rather than the noble gesture of a confident leader.

The recognition which the South had expected from abroad was contingent upon a Confederate victory, and the Southern retreat from Maryland could hardly be construed as a victory even by the Confederacy's most sanguine European supporters. The retreat, in turn, led to second thoughts; second thoughts, to inaction; inaction, to continued nonrecognition — right

through to the end of the war. Lincoln's Emancipation Proclamation, moreover, swayed foreign public opinion to the North which now seemed to stand for the oppressed rather than as the oppressor of a popular revolt.

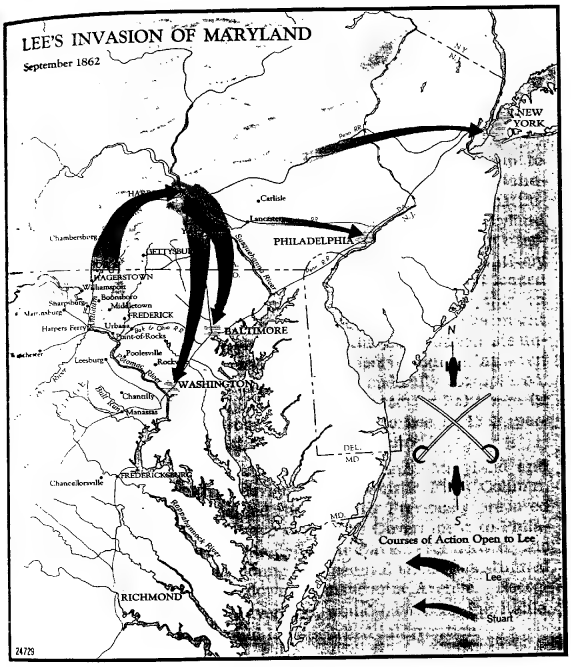
Finally, Southern hopes which had been raised to the heights with the victory at Second Bull Run and with the transfer of fighting from Southern to Northern soil ran the gamut to utter frustration in less than three weeks. Although the spirit of the South was as resolute after Antietam as before, a gnawing doubt now marched side by side with this spirit.

Lee unequivocably blamed the failure of the invasion of Maryland on the lost order. He defended the division of his army, pointing out the need to eliminate the threats to his lines of communications represented by Martinsburg and, particularly, Harpers Ferry. In addition, Jackson's investment of Harpers Ferry provided vast stores of the very treasures of food, clothing, and weapons which were some of the objectives of the invasion. At the very least, if McClellan had not obtained a copy of Lee's orders, Lee could have reunited his army long before the dilatory McClellan would have moved, and Lee could have re-equipped it with some of the hoard from Harpers Ferry and given his 10,000 or more stragglers time to rejoin his army. Thus refurbished, Lee could have gone on to Harrisburg, destroyed the bridge, and sought out McClellan.[2]

The Confederates held Harpers Ferry and had destroyed much of the Baltimore and Ohio Railroad, an important east-west link. Destruction of the railroad bridge at Harrisburg would have cut the east-west connection for Washington, Baltimore, and Philadelphia. Even if Lee had subsequently been defeated by McClellan — a most unlikely event on the basis of previous encounters between these generals — many months would have elapsed before the rail connection over the Susquehanna River could have been re-established. Reconstruction of the bridge from the heights over the river would have been, at the very least, a major engineering achievement.

The cumulative effects of a victory by Lee over McClellan in Maryland would have been devastating to the North. Lee could have moved on to Harrisburg and with his headquarters

[2] Courses of action open to Lee if McClellan had not gained possession of Special Orders 191 are shown on the map.



in the capital of Pennsylvania, astride the rail lines to Philadelphia, Baltimore, and Washington, would have menaced all three of these terrified metropolises. During Lee's second invasion of the North in 1863, Richard S. Ewell approached within three miles of Harrisburg before he was called back because of the chance encounter at Gettysburg. The panic of the Pennsylvania countryside at that time is a slight indication of what Confederate headquarters at Harrisburg might have caused — especially if Confederate cavalry under James E. B. ("Jeb") Stuart had been permitted to raid in the direction of Philadelphia and even New York.

If Lee had chosen to commit himself early rather than to wage psychological warfare against the three cities simultaneously, he might have marched directly from a victorious battlefield against Baltimore or Washington. The very Maryland farmers who watched impassively as Lee's half-starved tatterdemalions poured across the Potomac might conservatively have estimated that a victory by Lee on Maryland soil looked dangerously like the beginning of the end of the war on Southern terms. The number of recruits whom Lee might have picked up in Maryland, under the band-wagon steamroller, would have increased sharply, thus augmenting even more an army in which straggling had suddenly disappeared. The strong secessionist tendencies indicated by Baltimore in April 1861 might have opened that city to Lee in 1862, permitting his entry against bare token resistance.

Washington, thus isolated by a secessionist Maryland and itself swarming with a devious, opportunistic Fifth Column, could hardly have remained the capital. Previously prepared evacuation plans might have moved the Government to Philadelphia or New York while Jefferson Davis, President of the Confederacy, graciously doling out merciful terms to a stunned city, rode triumphantly down Pennsylvania Avenue. Recognition, but no longer intervention, would have been inevitable. A triumphant South would have scorned intervention.

While Lee campaigned in the North, 20,000 recruits were assembled in Richmond for his army. A victorious Lee, gathering volunteers in Maryland, would hardly have needed these recruits. Bragg, however, pressing on Buell in Kentucky, could have used the recruits, and such reinforcements might well

have balanced the numbers in Bragg's favor, giving him the opportunity of making good his intention to install a Confederate governor at Frankfort, the capital of Kentucky.

The Federals in the West would have had to withdraw troops from wherever they were available to relieve Buell, thus taking pressure off Van Dorn in Mississippi and Tennessee. Van Dorn, for his part, then would have been free to attain whatever objectives his romantic mind could perceive.

Lee on the loose in the east and Bragg in the west could have provided direct military support to the Copperheads. The fall of Baltimore would have added political dynamite to the Copperhead movement and very likely would have resulted in armed uprisings in such widespread areas as Indiana and New York, accompanied by political defeat for the Republicans in the Congressional elections of 1862.

Lincoln, with defeat on the battlefield and at the polls a haunting reality, would hardly have dared to propose the Emancipation Proclamation. An independent Confederacy, badly in need of a labor force, might have maintained the institution of slavery until the increased use of the machine made slavery an expensive economic anachronism.

If secession had become an historical fact, Great Britain could have obtained the cotton that its textile mills needed and eventually could have established a successful partnership with the Confederate States of America. In such a partnership the agrarian cotton empire of the Confederacy with its raw materials would have complemented the manufacturing maritime empire that was Great Britain. The South, led by an aristocracy with a lineage as proud if not as old as Britain's nobility, could have been accepted as a peer and an ally by its British cousins.

The Yankees, on the contrary, swaggering industrialists and traders, with their eyes to the sea, by the very similarity of their economic interests could never be a partner or an ally of the British but must always be a rival against whom war might very well erupt. Finally, although the Union had an Anglo-Saxon heritage, it was a melting pot with many social customs alien to the British, who found Southern Anglo-Saxon homogeneity more palatable.

Confederate expansionism would eventually have tangled with Yankee imperialism, and a return war, fanned by interested third powers, might have completed the cycle, leaving both North and South physically and spiritually exhausted second-rate powers.

Napoleon III, having recognized the Confederacy, would have received a *carte blanche* from the South to pursue his conquest of Mexico. The North, defeated and confused, would have been able to do very little to prevent Napoleon from succeeding.

Tradition and a considerable body of opinion have held that Gettysburg, not Antietam, is the more nearly decisive battle and the turning point of the Civil War. However, the relative positions of the North and South at both these junctures in history clearly seem to point up September 1862 as a period far more critical for the North and far more favorable for the South than July 1863.

By the spring of 1863 the Union had begun to perceive its true strategic objective in the war, not as the capture of Richmond, the Southern capital, but rather as the destruction of the Confederacy through the tightening of a ring of death and devastation about the beleaguered South. Southern arms in the West had given ground slowly but inexorably, until in one harrowing 24-hour period word came almost simultaneously of the surrender of Vicksburg and the abandonment of Chattanooga. The Mississippi Valley was lost, the Mississippi River opened to Northern commerce from St. Paul to the Gulf of Mexico, the Confederacy west of the river irretrievably written off, and most of Tennessee held in Federal hands. After such losses as these, of what small import was Lee's check at Gettysburg — a check which lost not one square inch of Southern territory nor opened one single path of invasion to the North?

But what if Lee had won at Gettysburg? His capabilities, still impressive, would have been offset by new limitations. Although Lee's army apparently was in better physical condition than in its first invasion, being better clothed and equipped and having counterbalanced Antietam with convincing victories at Fredericksburg and Chancellorsville, the source of its manpower was running low and the reservoir which replenished emptied ranks was dried up. Reserves such as those

which awaited Lee in Richmond after Antietam were no longer procurable, and the will of his gallant veterans to fight and to die was being sapped. Mere numbers, though larger than in 1862, were minus one who was worth 10,000 — Jackson was no more.

No matter how overwhelmingly Lee might have won at Gettysburg — and he would have had to pay a heavy price in lives for any victory — he could hardly have achieved more than local success. The resiliency which the Federals showed in bouncing back from crushing defeats at Fredericksburg and Chancellorsville, on enemy soil, could hardly have been expected to be less than what they would have shown on their home soil after a crushing defeat at Gettysburg.

For Lee to have exploited a victory at Gettysburg would have meant his fighting and winning two or three more Gettysburgs against the additional two or three large armies which the Union would have been capable of throwing against his depleted ranks. For the Confederacy to seek reinforcements for Lee from the West would have disastrously weakened an already exposed soft side and would have left a victorious Lee in Pennsylvania with a hinterland of the South Atlantic States and nothing more — a successful invader without a home base.

By the time of Gettysburg the Congressional elections had already been won by the Republicans. The Copperhead movement was losing momentum, and key Copperheads were in jail or on their way to jail. The secessionist tendencies exhibited by Maryland in 1861 were gone, and the Pennsylvania territory in which Lee was operating in 1863 was hostile to him, win or lose. Lee's lines of communications were long, thin, and vulnerable to the improved tactics and leadership of the Federal cavalry, which maintained a constant check on Lee's movements.

Finally, the recognition by foreign powers, which seemed so real and close when Lee invaded the North in 1862, was irrevocably lost by 1863. Napoleon III, in the process of setting up a puppet emperor in Mexico, remained eager to recognize the Confederacy. Great Britain, however, had lost interest, and Napoleon's clumsy efforts at coercing the British Government were confronted with a wave of sympathetic popular opinion for the side which had lined itself against slavery.

Although it is difficult to say whether the gallant Army of the Potomac, which sent Lee reeling back into Virginia, or the obscure little private who found the lost order played the greater part in dissolving Southern dreams of invasion, of success, of severing East from West, of recognition, and of changing the course of world history, one conclusion is clear: the intelligence information which precipitated the Battle of Antietam and set in motion forces which marked the turning point of the Civil War resulted in a different world from the one that might have been if the lost order had never been lost — and found.

CRITIQUES OF SOME RECENT BOOKS ON INTELLIGENCE

THE NEW CLASS — AN ANALYSIS OF THE COMMUNIST SYSTEM. By *Milovan Djilas.* (New York: F. A. Praeger. 1957. Pp. 214.)

The New Class, by Milovan Djilas, has been labeled as "The book that is shaking the Communist world." Critics and editorialists have been lavish in their praise. "The book that is a bomb" — "that most penetrating analysis of modern Communism" — "probably the most devastating anti-Communist document ever written" — "a manifesto marking the death throes of Communism" — these are some of the epithets encountered.

This review proposes to take a more sober approach and to examine particularly one aspect of the book which in the first eruption of enthusiasm has not yet been adequately explored. If Djilas' insights and formulations are valid, they should have an impact not only on "the Communist world" but also on ours, — the world of the intelligence and operations officer. The observations on this point are advanced not to provide final answers but, rather, to stimulate further questions and thoughts.

There is no doubt that the fundamental insights expressed by Djilas are valid. Djilas defines Communism as the most highly developed technique for the exercise of totalitarian power to appear in historical time.

Controlling the coercive apparatus, the mechanism of "nationalized" property, and the minds of the people ("ideology"), the Communist Party has evolved and degenerated into a "new class" of ruthless power holders and exploiters who conceal their self-interest behind a facade of long-term, idealistic objectives which are incapable of realization.

The most striking feature of Djilas' definition and exposition of Communism is its coincidence with the Western, non-Communist view. One need only compare the moving chapter "Tyranny over the Mind" in *The New Class* with the sharply analytical and thoughtful piece by Isaiah Berlin, "The Silence in Russian Culture," [1] in order to realize this coincidence. As a matter of fact, Djilas is quite correct when he states, "Almost

[1] Foreign Affairs, Vol. 36, No. 1, October 1957.

everything in this book has been expressed somewhere else, and in a different way." Notable among similar views "expressed somewhere else" are analyses made by western democratic socialists.

It may therefore be asked whether Djilas, in his supremely courageous act of writing and publishing abroad *The New Class,* was motivated by external influence (that is, Western views) or by internal (psychological) factors. A case, it is believed, can be made for the operative quality of both factors, and it may be claimed, somewhat paradoxically, that, whereas the Communist system triggered the psychological conflict within Djilas, the West furnished the ammunition. Djilas himself admits that he evolved from the position of Communism to the position of Democratic Socialism.

The book reveals some of the motivations underlying Djilas' acts. Djilas shows quite clearly his nostalgia for the spirit of the "revolutionary" period prior to the seizure of power in Yugoslavia and, as a matter of fact, elsewhere in the Communist movement. He also emphasizes his personal role in formulating the anti-Stalinist ideological positions of the Yugoslav Party subsequent to the break in 1948 and shows irritation over the fact that the Party bosses discarded his formulations after Stalin's death, in the course of the Soviet-Yugoslav rapprochement. By way of over-simplification, Djilas revolted not so much against the revolution per se but against a revolution which had grown fat. Further, he took the anti-Stalinist, anti-Soviet line more seriously than his colleagues, and, as so often had been the case of other defectors, fell out of step, unable and unwilling to readjust. Whereas the physical and intellectual courage displayed by Djilas are beyond doubt and disparagement, his case, from a psychological point of view, would appear to be one of unrequited love turned into violent though controlled and sublimated hate.

This interpretation is supported by the fact that the only truly "new" concept forwarded by Djilas' book is the concept of the "New Class." This concept, in the final analysis, is an explosion of the mind: it is an invective. Communist polemics, from Marx to Khrushchev, are richly interspersed with the righteous (or "scientific") fury of invective. Nevertheless, Djilas' formulation whereby the advocates and engineers of a classless society have become a new class of totalitarian exploiters — more ruthless, degenerate, and self-seeking than any other class of exploiters in history — clearly is the strongest and most damaging invective ever hurled at Communism. It also happens to be self-evidently true, and is therefore, from a Communist point of view, unforgiveable.

The general validity of the book, then, need not be belabored. Nor should it be necessary to point out that the book, though evidently stemming from a personal, emotional crisis, is a calmly rational and systematic exposition of the Communist system. Nevertheless, the book's impact on Western non-Communist opinion has been somewhat sensationally enhanced by the fact that the author has been a Communist. Conversely, it is to be feared that the impact of the book on Communist opinion will be less spectacular than predicted by certain headlines. Communists, as a class, are still conditioned by discipline and indoctrination, and a majority of those who will be reached by the book (over the obstacles of external or self-imposed censorship) are likely to reject or discredit it as the work of an "imperialist agent." Such rejection should be anticipated on the part of those Free World Communists who, in contrast to Djilas, have had no first hand experience with Soviet or Bloc reality. Nevertheless, under the conditions of intellectual fermentation existing in the Bloc today, it may be presumed that Djilas' ideas will take root in the minds of a self-selected few there.

The recent case of a defected Chinese youth revealed that he ran into trouble with the Communist Party because he had criticized it for representing "vested interests." The concept of "vested interests" is certainly related to the concept of "the new class." Tenuous as such indications are, they point to a certain receptivity. Although certainly no single book can shatter the Communist world, Djilas' *The New Class* should strengthen the determination of Communists who by way of similar experience are reaching similar conclusions.

If the findings of *The New Class* must be considered valid and supported by the findings of the West, the question arises as to their applicability as guidance for our own work and the functioning of this organization and of the intelligence community as a whole. There are certain specific positions in the book which could indeed form the basis for a renewed discussion of intelligence as well as operational problems. Some of these

are discussed in the following paragraphs. A great many more could be developed.

In Djilas' view the essence of the Communist system automatically or naturally produces intrigues and struggle for power at the top. There should be little difficulty in accepting this view, particularly in the light of the events of June 1957 in the USSR.

If accepted, this view could and should have a bearing on the effort of the intelligence community to follow, understand, interpret, and anticipate power struggles and shifts. The effort would have to be implemented with two basic tools — intensive interpretative biographic research employing the meticulous methods of counterintelligence and, simultaneously, intensive exploitation of overt Bloc materials (press, magazines, books, and broadcasts) employing the method of comparative analysis and symbol interpretation.

One need only review the splendid volume on Soviet Personalities produced by the National Intelligence Survey to realize both the potentialities and shortcomings of current biographic research conducted by the intelligence community. The NIS volume on Soviet Personalities is a veritable gold mine insofar as indications of clique-connections and infighting in the Soviet elite are concerned. However, this admirable work is outdated (it was published in 1954) and does not contain biographies on dead Soviet leaders, such as Zhdanov and Voznesenskiy, whose connections with the living are of current significance. The admirable State Department publication "Soviet Political Leaders" fills the gap only to a certain extent because it is merely an index to current positions of Soviet leaders.

Basic biographic intelligence produced by the NIS on the leaders of China, Poland, and Yugoslavia, for instance, dates back to 1951, 1952, and 1953 respectively. There may be perfectly valid reasons for such a lag in the production of basic biographic intelligence, and there are certainly supplementary projects in process and knowledgeable individuals scattered throughout the intelligence community. Nevertheless, the Djilas theses may serve an extremely useful purpose in focusing attention on some of our own problems relating to biographic and interpretative intelligence production on the Soviet and Bloc elite — especially the problem of concentration and centralization.

In this context it is felt that the systematic study of the Soviet and Bloc elite need no longer be declared out of bounds as the area of the unknowable. Myron Rush, in his brilliant study "Khrushchev and the Stalin Succession" (Rand Corporation, March 1957), has clearly demonstrated the validity of his method — exploitation of the Soviet press and literature through painstaking comparative analysis of the almost hieroglyphic symbols and "signals" deliberately employed in Soviet communications. By March 1957, Myron Rush had accurately described the tense situation within the Soviet elite which was to erupt in June.

The Djilas thesis should provide a powerful stimulus for reviewing the practices and methods prevailing within the intelligence community concerning the study of Soviet and Bloc personalities. Needless to say, the outcome of such review would automatically affect collection and other operational efforts.

In the field of psychological warfare a closer examination of Djilas' views on Communism's vulnerabilities may lead to a renewed concentration of fire power. Djilas does not deal directly with psychological or political warfare, but it is fairly evident from his thoughts scattered through the book that he has considered five broad appeals and targets in the Bloc.

First, he maintains that elucidation and exposition of the actual class relationships prevailing in the Bloc would have a liberating effect. "If the character of property and social relationships brought about by the Communist revolution is strengthened and defined, the prospects for liberation of the people from such relationships become more realistic. *If the people are not conscious of the nature of social relationships in which they live,* or if they do not see a way in which they can alter them, their struggle cannot have any prospect of success." (Italics supplied.) This approach would be Communist technique in reverse. Just as Communist propaganda "unmasks" capitalism, Djilas here appears to advocate the unmasking of the class monopoly of the Communist Party.

Second, he appears to favor maintenance of pressure for the rights of workers to share in the profitmaking process. "To divest Communists of their ownership rights would be to abolish them as a class. To compel them to relinquish their other social powers, so that workers may participate in sharing the

profits of their world — which capitalists have had to permit as a result of strikes and parliamentary action — would mean that Communists were being deprived of their monopoly over property, ideology, and government. This would be the beginning of democracy and freedom in Communism, the end of Communist monopolism and totalitarianism."

Djilas subsumes to this appeal "a demand for freedom — based on the position that capital goods produced by the nation can be managed more efficiently by society than by private monopoly or a private owner, and consequently should actually be in the hands or under control of society exercised through its freely elected representatives . . . ." In other words, Djilas favors an appeal based on the fact that "totalitarianism is unnecessary as a means of protecting the workers from exploitation . . . ."[2]

Third, Djilas holds that the monopoly position of the Communist Party can be shaken by exposing its inherent conflict with the ideological and legal facade of the system. "The contradiction between the new class's real ownership position and its legal position can furnish the basic reason for criticism. This contradiction has within it the ability not only to incite others but also to corrode the class's own ranks, since privileges are actually enjoyed by only a few . . . . The fact that this contradiction is so obvious has been the reason for the changes made by the new class, especially in so-called liberalization and decentralization . . . . The groundwork for reforms is laid when the discrepancy mentioned above becomes public . . . ." In this context, Djilas also favors pressure for an "independent judiciary and the rule of law" which "would inevitably make it possible for an opposition to appear."

Fourth, he opens a perspective on special appeals to the military when he claims "a military dictatorship in a Communist system would denote great progress." Although he acknowledges that such a development would occur only under special circumstances, he feels ". . . it would initially be a form of party dictatorship, or it would have to conceal itself in the Party. But this would inevitably lead to a change in the entire system."

[2] Djilas Milovan "The Storm in Eastern Europe," The New Leader, 19 November 1956.

Fifth, Djilas emphasizes the potency of the appeal to the truly national sentiments and aspirations of the peoples subjugated by the Communists within and without the USSR. "The various nations, each of which once had its own form and color, its own history and hopes, stand virtually still now, gray and languid beneath the all-powerful, all-knowing, and essentially non-national oligarchies." But "just as personality, various social classes, and ideas still live, so do the nations still live; they function; they struggle against despotism; and they preserve their distinctive features undestroyed."

A more detailed and practical analysis of Djilas' explicit or implicit positions on psychological warfare lies beyond the scope of this review. Djilas' emphasis on certain appeals stems from his basic faith in the efficacy of pressure of popular opinion within the Bloc under current conditions, and would appear to merit close study.

To sum up, *The New Class* is not a book that can be expected — magically — to "shake the Communist world." Its broad effect on Communists cannot be accurately gauged. Nor is *The New Class* a perfect book. Djilas still has certain characteristics of the Marxist-Communist: a tendency to discover fundamental "laws of society"; a predilection for declaring certain trends to be "inevitable"; a hankering for a supreme, almost monolithic — although non-Communist — world outlook which would embrace all the answers to all the questions.

Nevertheless, if it were to accomplish nothing else but a determination on our part to sharpen our own operational tools, it will have served an eminently good purpose.

LENA MARKS

THE SOVIET SECRET POLICE. By *Simon Wolin* [1] and *Robert M. Slusser.* [2] (New York: F. A. Praeger. 1957. Pp. 408.)

It should not be necessary by now to come to the defense of that rather forlorn figure, the outsider who has the temerity to write on intelligence. With a decade of experience and reflection behind us and the work of our predecessors to draw upon, we should by now have achieved breadth of view sufficient to appreciate the contribution that the amateur or the independent scholar — the man who does not earn his living at intelligence work — can make to our discipline. Instead, I fear, we have grown nearsighted from looking down our noses at those who invade our field without benefit of classified data.

The word "professional" recently has gained a prominent place in our vocabulary. It reflects, I believe, a growing self-consciousness, a developing tradition, an understanding that in its broadest sense intelligence is an intellectual discipline. Intelligence, however, is a Trappist-like profession. Those who enter it take vows of silence. All of us understand the peculiar need for a limitation upon our right to professional self-expression and freely accept it, but this barrier also can bring frustration and an unconscious rejection of the contribution made by amateurs who are not thus hampered. Perhaps the best works on intelligence are written by these same amateurs simply because our rules of the game do not permit the professional to compete.

"Professionalism" easily becomes a refuge for the professional intelligence man. He falls back on his (he believes) superior knowledge of tradecraft and techniques or on his training; he is proud that he is really "witting." He manages

[1] Simon Wolin is the brother of David J. Dallin, the author of *Soviet Espionage*. Now in his sixties, Wolin was educated in Russian and European universities. For a time he was associate editor of the *New Leader*, and later did research for US government agencies. At the present time he is a free lance writer.

[2] Robert M. Slusser attended the University of Chicago and the Russian Institute at Columbia. He served a short time as Associate Director of the Research Program on the USSR, an affiliate of the East European Fund, Inc., which was financed by the Ford Foundation. Slusser is now employed at the Hoover Library for War, Peace and Revolution. He has edited *Soviet Economic Policy in Post-War Germany*, a collection of papers by former Soviet officials.

to forget that a professional worth his salt must pause occasionally to gain a broad and detached view of his discipline.

It is precisely this detached view, unclouded by our day-to-day problems, that the amateur or scholar sometimes can give us.

Every work on contemporary intelligence and/or for security organizations, be it amateur or scholarly, is vulnerable to professional criticism — at least on the narrow ground of scope and accuracy of data. With rare exceptions the outside writer is hobbled by limitations that are the converse of our own: he is denied access to information. Even when the outsider relies on the personal experiences of former members and victims of the service, as Wolin and Slusser have largely done, the professional will often judge his work to be superficial, out of date, or lacking in precision. The professional who loses himself in the maze of daily problems and decisions will soon discover, however, that classified information is his only remaining stock in trade! He has lost the ability to measure the broad sweep of his subject.

If he is wise, the amateur does not compete with the professional on the latter's home ground. Instead, he escapes to a wider field where he can more than hold his own — broad and basic questions of philosophy and policy or the presentation of a service in terms of its historical development.

This, I believe, is what Wolin and Slusser seek to do, at least in part, in their collection of essays on Soviet state security. The fact that their success is less than complete does not invalidate my thesis. Their work is significant, indeed, to the extent that it interprets the historical development and defines the philosophical bases of Soviet state security.

Wolin and Slusser have drawn together in one volume separate studies on Soviet state security, earlier prepared by defectors from its ranks and by its victims for the now-defunct Research Program on the USSR. Their historical survey of Soviet security organizations from the Cheka to the KGB introduces and gives unity to these essays, which deal primarily with the internal repressive and counterintelligence roles of state security. External espionage activity receives only superficial and generalized treatment.

Events in the Soviet orbit during late 1956 and the discovery of new documentary material after the book went to press

presented serious problems of organization to the editors. They solved these difficulties, not entirely to the reader's satisfaction, by hurriedly tacking on a "postscript" and "addenda" in the form of notes. Constant reference must be made to this added material if the text is to be brought into any order.

The success of any collective work is dependent, in the main, upon two things: the competence of the individual authors and the skill of the editor in distilling unity of purpose from divergent minds. For several reasons, Wolin and Slusser were unable to achieve this editorial standard. Philip Moseley, a former director of the Research Program, earlier commented on the serious editorial problem that plagued the Program because former Soviet scholars often could not meet the criteria of American research. Many times the work of such men had to be torn apart and completely recast. Evidence at hand indicates that some 16 research papers were used, wholly or in part, in preparing the 9 published essays. It is unlikely that all these papers were originally written under the American editors' supervision. Their editorial work, which was probably done late in the life of the Research Program when financial resources were low or nonexistent, is not of the highest standard.

Wolin and Slusser themselves have written the most valuable essay. Their historical survey of Soviet state security is the finest short summary of this subject published in English. Its value is enhanced by extensive footnotes which are detailed comments rather than mere source references. Here we can see the genesis of policies that came to full and bloody flower in the thirties: strict party control of state security, the growth of state security's right to arrest party members for opposition to dicta of the leaders, and the beginnings of Soviet espionage work abroad. (In his essay, Konstantin Shtepa [1] also discusses certain early state security policies from a different point of

[1] Konstantin Shtepa was educated in history and philology at Russian universities before the revolution. He fought with the White armies, then made his peace with the Communists, and continued his academic career at the University of Kiev until his arrest in 1938. Shtepa cast his lot with the German invaders and was later evacuated by them. His scholarly work in emigration has been disturbed by political conflicts with Ukrainian refugees in the west. He presently resides in the US. Using the pen name W. Godin, he collaborated with F. Beck on the volume, *Russian Purge and the Extraction of Confession* (New York, 1951).

view.) Wolin and Slusser touch on, although they do not discuss, Stalin's own early experience in the Cheka. In the light of later developments, Stalin's personal participation in Cheka work is significant. This introductory historical essay is easily the best of the book. It is required reading for all students of Soviet state security.

Konstantin Shtepa has written on Feliks Edmundovich Dzerzhinskiy, first chief of the Cheka, and on Chekism, the doctrine of organized terror. Possibly because most source materials are in Russian, the West has done little work on the personality and career of Dzerzhinskiy. Like Stalin and Mikoyan, Dzerzhinskiy once intended to enter the priesthood. Instead, he became an idealist of revolution, the "saint of Bolshevism," whose influence on the state security apparatus is still visible today.

Dzerzhinskiy was the greatest director of Soviet state security and the only true innovator among this motley crew. His successors have been dilettantes (Menzhinskiy), mere executive officers (Yagoda and Yezhov), ambitious politicians (Beriya), or bureaucrats of terror (Ignat'yev and Serov). Under Dzerzhinskiy the Cheka developed characteristics that came to full growth in successor organizations. Even before the Cheka was created, and immediately upon the success of the October uprising, Dzerzhinskiy became commandant of Smolny, the headquarters of the new regime in Petrograd. He thus personally assumed responsibility for the lives of the leaders, a function that later passed to the Cheka and its successors. Early in the new regime, state security became interested in internal party developments. It was Dzerzhinskiy who first proposed that party members must notify state security of opposition groups or tendencies within the party. When the collective heirs of Stalin strove to loosen state security's grip on the party they were simply trying to reverse an early Dzerzhinskiy policy. Time will show just how successful they were.

The doctrine known as Chekism was first formulated in Dzerzhinskiy's time. It is a witches' brew of prerevolutionary Bolshevik theory, operational doctrine, and technique (inherited in part from the tsarist *Okhrana*), the traditional Russian view of secret police functions within the state, a cynical belief that the human being is the Soviet state's cheapest natural resource, and the Chekists' own knowledge that they form a

special privileged caste. Chekism is the doctrine of an elite created to defend a secular religion. We court disaster if we fail to understand it.

With one exception the other essays are lower in quality than the first two. All reflect the basic weakness of any volume on contemporary Soviet state security — the lack of access to timely information. Early in his essay on the organization and function of state security, Ye. A. Andreyevich [4] makes it clear that the exact structure at the time he wrote was not known to him. He attempts, in compensation, to describe the hybrid created by Beriya in 1953 when he merged MGB and MVD. Much of Andreyevich's information was already out of date when he used it.

Little would be accomplished by a close review of Andreyevich's errors. The nomenclature and numerical designations he assigns to MVD components in 1953 cannot be trusted. He deprives the Foreign Intelligence Directorate of any responsibility for Satellite security/intelligence services. (Andreyevich does not discuss the adviser system in the Satellites.) His description of legal and illegal intelligence networks abroad is confusing and, in fact, inaccurate. Andreyevich's essay, however, does show the impact of the security machine on the average Soviet citizen.

Two essays on Soviet state security organizations since World War II (actually a discussion of state security after the creation of KGB), written by V. P. Artem'yev [5] and G. S. Burlutskiy,[6] must be used with discretion. The first, which is devoted to postwar organizational structure, contains numerous errors and distortions of fact.

It is regrettable that a disproportionate amount of space is given to the border guards and other armed forces of state

[4] Ye. A. Andreyevich is one of many aliases and pen names used by Yevgeniy A. Karpovich, an electrical engineer of Soviet origin. Following exile to Siberia, he was released for military service and ultimately was sent to Germany to assist in dismantling industrial plants. He defected to the British in early 1946.

[5] Col. Vyacheslav P. Artem'yev, alias Vasiliy Chomenko, formerly of the NKVD, was at one time employed as lecturer at the US Army school in Regensberg. He is the author of *Corrective Labor Camps* (in Russian), (Munich, 1956).

[6] Lt. Col. G. S. Burlutskiy served with Soviet frontier troops until his defection.

security. Artem'yev and Burlutskiy describe the protection of Soviet frontiers in almost painful detail. Much of their information bears the stamp of truth, although I am not certain that either man is equipped to discuss the higher echelons of this directorate. Only incidental attention is paid to state security espionage activities abroad. Artem'yev and Burlutskiy, whose competence to handle this subject I question, have written a short and inadequate essay on espionage in Western Europe. It contains errors of fact, interpretations, and emphasis. The authors, for example, deny the elementary fact that Moscow closely supervises all foreign residencies and networks. Their failure to consider in any detail the espionage role of Military Intelligence (RU) robs their paper of depth.

The best essay by a former Soviet citizen is A. Grigor'yev's[1] paper on investigative methods. Grigor'yev himself has felt the knout of state security. Although frankly based on experience in the thirties, this essay has much value for the present-day student. Grigor'yev injects the flavor of Soviet life into his description of the recruitment and handling of secret informants; the preparation of cases against suspects; and the procedures of arrest, interrogation, and extraction of confession.

Perhaps because of the nature of their material, all essays by former Soviet citizens, except Shtepa's paper on Dzerzhinskiy, are sparsely footnoted.

Students of Soviet security/espionage organs will welcome the editors' reading list. Although it is poorly organized, this list is perhaps the best available compilation of source and secondary materials in Russian and the principal Western languages on Soviet state security. It is an indispensable tool for the specialist.

The Soviet Secret Police, is, then, a book of uneven quality. Its essays range from the indispensable to the superficial. It is poorly organized. It contains some errors of fact and interpretation. Yet it is a book that you, the professional intelligence man, should read.

Here you can find at times something of that broad view I mentioned earlier. So put aside for awhile your problems

[1] It has not been possible to identify A. Grigor'yev.

and decisions, shove back the papers on your desk, and take a close look at the face of the enemy.

Yes, this is a book that you should read. Read it selectively, and with care to be sure — but read it.

JOHN RONDEAU

WE SPIED . . .

Among the books recently published which are of interest to persons in the field of intelligence there are two extreme leftwing publications. One is by Herbert Aptheker, a writer with a long leftwing record and a member of the Communist party. It is entitled *The Truth About Hungary.* This book goes into the causes of the Hungarian revolt as Aptheker sees them. In a chapter called "Counter Revolution and Cold War," Aptheker holds up for scrutiny what he calls "one aspect of American imperialism's program. . . ." This aspect he defines as an elaborate and sustained campaign of subversion and destruction againt the lands of Socialism. The villain of his piece is CIA, and he spends forty pages dissecting the Agency. He quotes from many of the published materials on CIA, turning the meanings to meet his ends. For those who wish to read the Communist line on CIA, this chapter is informative. Also it shows the extent of the Communist effort which goes into the detailed record that apparently is kept of all overt references to CIA.

Another book replete with leftwing dialectic is *The Petrov Conspiracy Unmasked,* compiled and edited by W. J. Brown and published in Australia. A very crude attempt to discredit the Royal Commission's investigation of the Petrov case has been made in this book. All of the stock phrases and techniques of dialectic are to be found. The most absurd of these are in the *non sequituri* in criticizing the procedures of the Commission. The author cites from the transcript and then cites all sorts of literature which, he alleges, refutes the arguments or proves that the members of the Commission were incompetent. The book can well be used as an example for students of Communist dialectics. The principal theme of the book is that the Petrovs were incompetents, about to be fired from the Soviet service. Petrov was alleged to be a man of immoral character and his wife was described as being so incompetent as a clerk that, in spite of constant supervision, she thoroughly botched anything she attempted to do. According to the author, Mrs. Petrov was about to leave her husband when the whole case broke into the open. The collaboration of the

CIA and the Department of State (even the Secretary personally) with the Australian Security Intelligence Organization is also alleged.

A book which appears to be of interest is *German Rule in Russia 1941–1945,* by Alexander Dallin. This is a study of German occupation policies in Russia and it includes material on propaganda, the Abwehr, prisoners of war, and political warfare. There is a chapter on the Vlasov movement.

Roxanne Pitt is noted as being one of the principal British agents of World War II. She relates her ventures in *The Courage of Fear,* which Sir Robert Bruce Lockhart describes as bearing the stamp of truth on every page. The author worked with the Resistance, assuming various disguises and engaging in deceptions to assist British prisoners-of-war in escaping from Italy and France. Mingling with the enemy, she extracted vital information regarding the disposition of the German and Italian armies.

Resistance under the control of intelligence organizations has been discussed in many books. Annedor Leber, however, undertakes a different presentation of resistance. She collected sixty-four stories of resistance in Germany, selecting those individuals who undertook resistance activities as a matter of conscience. Hence the appropriate title, *Conscience in Revolt.* Although brevity limits its value and interest, the motives and manner of resistance of these German martyrs lends an unusual aspect to this treatment of resistance.

In sharp contrast to the customarily serious treatment accorded intelligence activities and recollections of an author's wartime exploits, Roger Hall writes with tongue-in-cheek to record his experiences in the OSS. His selection of the title, *You're Stepping an My Cloak and Dagger,* is indicative of the humorous style in which he reminisces about recruitment, training, and operational missions in Europe.

Charles Gibbs-Smith resorts to fiction and makes the most of his freedom from the limitations imposed by recording personal experiences. He has written an exciting and timely book about a rocket and guided missile scientist who fled the Russians, setting the stage for a daring escape from Vienna under the direction of intelligence operators. This takes place while the Russians stage an intensive hunt for their quarry, all of which results in an intriguing, suspenseful story. *Escape and Be*

Secret is written not only in a highly literate style but also it includes unusually interesting details of security measures used by intelligence forces to protect the scientist from attempts on his life.

For a real thriller by a good author, one can recommend *The Sledge Patrol,* by David Howarth. Howarth has written two excellent books regarding special operations in Norway during World War II. The present work has recently been serialized in *The Saturday Evening Post. Sledge Patrol* describes a very small segment of World War II, in which only a handful of people were involved. It was the fight to maintain the weather stations in Greenland, so that meteorological intelligence would be available for the Allied flights and sailings across the Atlantic. The Germans had to stop this service and to establish one of their own. The inevitable clash occurred in Greenland, between the Danes and Eskimos on one side and the German expedition to Greenland on the other. The reluctance of the Eskimos to fight and their lack of understanding of war and killing is an interesting factor. In the course of this operation, codes are compromised and the German leader defects. This excellent work should keep the reader up late at night, for it is a hard book to put down.

In the last issue, we mentioned Gordon Young's *Cat With Two Faces.* Another work on the same double agent has now been published, entitled *The Cat,* by Count Michael Soltikow. Here is the story of a French woman who was doubled by the Germans and used to track down members of the French Resistance.

Amiable Assassins is a tale of the Kachin guerrillas in Northern Burma during World War II, by one of their British officers, Ian Fellowes-Gordon.

The Rev. James Benson has written *Prisoner's Base and Home Again,* an account of his capture in New Guinea in 1942. He was a missionary, and his tale of Japanese prison camps and suffering has been well received in England. Another recently published tale of escape with the help of Chinese guerrillas is told in *The Long Trek,* by John Friend.

Many books have been written about British Special Operations, Executive (SOE) and its activities behind the lines in World War II. Fewer books have appeared, however, on cer-

tain corollary type activities. One such is *These Men Are Dangerous: The Special Air Service At War*, by D. I. Harrison. The SAS also operated behind enemy lines, but tended to operate more independently than those groups which linked up with the Resistance in the occupied countries. Lt. Harrison joined SAS in Egypt, and took part in the invasion of Sicily. He later jumped into France. The second of these formations was the Long Range Desert Group, and it is the subject of another book, *The Desert My Dwelling Place*, by David Lloyd Owen. This unit was also formed in the Middle East, and Colonel Owen describes its early activities in the desert and North Africa.

By the time this column is published, two more excellent books will have appeared. They are presently being serialized in the London press. The first is by Ian Fleming, whose other works have all made good reading. It deals with private intelligence operations against the diamond smugglers of recent vintage in South Africa. The Diamond Trust, it will be recalled, hired Sir Percy Sillitoe upon his retirement as head of MI 5, to combat the smuggling. He took one of his good operatives along with him. This book is written in good measure from the story of Sir Percy's top operative and is replete with the techniques of espionage in the popular style. The second book is by Wolfgang Leonhard, a German who was trained for action in the Comintern school and techniques. The installments which we have seen are informative reading.

WALTER L. PFORZHEIMER

SECRET

SECRET

STUDIES in INTELLIGENCE

VOL. 2 NO. 2 SPRING 1958

CENTRAL INTELLIGENCE AGENCY

OFFICE OF TRAINING

SECRET

All opinions expressed in the *Studies* are those of the authors. They do not necessarily represent the official views of the Central Intelligence Agency, the Office of Training, or any other organizational component of the intelligence community.

WARNING

This material contains information affecting the National Defense of the United States within the meaning of the espionage laws, Title 18, USC, Secs. 793 and 794, the transmission or revelation of which to an unauthorized person is prohibited by law.

STUDIES IN INTELLIGENCE

EDITORIAL POLICY

Articles for the **Studies in Intelligence** *may be written on any theoretical, doctrinal, operational, or historical aspect of intelligence.*

The final responsibility for accepting or rejecting an article rests with the Editorial Board.

The criterion for publication is whether or not, in the opinion of the Board, the article makes a contribution to the literature of intelligence.

CONTRIBUTIONS AND DISTRIBUTION

Contributions to the *Studies* or communications to the Editor may come from any member of the intelligence community or, upon invitation, from persons outside. Manuscripts should be submitted directly to the Editor, Studies in Intelligence, Room 2013 R & S Building [redacted] and need not be coordinated or submitted through channels. They should be typed in duplicate, double-spaced, the original on bond paper. Footnotes should be inserted in the body of the text following the line in which the reference occurs. Articles may be classified through SECRET.

25X1

For inclusion on the regular *Studies* distribution list call your office dissemination center or the responsible OCR desk, [redacted] For back issues and on other questions call the Office of the Editor, [redacted]

25X1

25X1
25X1

CONTENTS

UNCLASSIFIED ARTICLES

CONTRIBUTORS TO THIS ISSUE

Robert H. Adams, technical advisor on new methodology in air targeting.

Stanley E. Smigel,

Charles H. Helsper, Chief of Support Branch in the Industrial Register.

George Romano, CIA intelligence officer.

Leonard Hilden, member of the Social Psychology Research Group.

Richard Gafford, member of the Social Psychology Research Group.

George A. Pughe, Chief of the Library of Congress' Air Information Division.

R. A. Random, research scholar in social science.

Allan Evans,

Next 5 Page(s) In Document Exempt

Approved For Release 2005/03/15 : CIA-RDP78T03194A000100020001-2

25X1

SECRET

This description of how an electronic computer war-games the strategic air battle is the second of a series illustrating advanced methods in air targeting.

DEVELOPMENTS IN AIR TARGETING: THE AIR BATTLE MODEL

Robert H. Adams

In pursuit of its basic objective, the assessment of enemy strengths as targets for US air action, air targeting is developing a series of mechanized analytical techniques as an aid to its intelligence production. The Military Resources Model, described in the Winter 1958 issue of *Studies in Intelligence*, is intended to provide estimates of capabilities to build up or mobilize military resources for war or to recuperate from attack. The Air Battle Model, described here, will provide estimates of capabilities to carry out war plans in the face of opposing offensive and defensive air operations.

This Model provides a high-speed electronic computer simulation of the effects of an air war on both sides, portraying both air and ground support operations. It is dynamic, reflecting the interaction of forces over very short periods of time to represent a constantly changing situation. It is automatic for whatever length of time real-life operations can be pre-planned. It provides a chronological history of the war, reflecting in detail the momentary net capability of each side as the war progresses. In effect, it provides a measurement of the degree to which offensive and defensive plans can be implemented or disrupted.

In making use of this war game mechanism, intelligence may seem to be getting into the determination of strategy. Lieutenant General John A. Samford noted this problem when he wrote in the Fall 1957 issues of *Studies*,[1] "The extent to which intelligence should contribute to this process [of war

[1] "The Intelligence Necessary to the Formulation of a Sound Strategy," *Studies in Intelligence*, Vol. 1, No. 4.

gaming] may be disputable, but it appears certain that the intelligence necessary to a strategy will be better if an advanced war gaming process of some sort is kept closely in mind during all the processes of intelligence preparation." The Air Battle Model is designed to achieve precisely this purpose.

The Purpose of the Air Battle Model

The Air Battle Model was initially designed for analysis of what was called the BRAVO (or "Blunting") Objective. At one time the BRAVO Objective was "to destroy the military, logistic and control strengths of the Soviet Bloc that enable the enemy to deliver air weapons against friendly forces and installations and to resist penetration of his airspace." Over the past few years, significant changes in the philosophy of the BRAVO Objective have occurred. Two of the current purposes of warfare are now listed as: (1) to prevent unacceptable launchings of Soviet atomic weapons against the US and its allies, and (2) to neutralize or destroy the general threat of Soviet air action against allied Air Forces. The current basic strategic concept holds that in event of war we must (1) immediately stop atomic attacks against the United States, our allies, and our military forces abroad; (2) immediately disorganize and disrupt the enemy air defense system; (3) stop surface force attacks against our friends and our sea lines of communication, and then (4) calculate our relative net position and determine what remaining enemy strengths require destruction or denial in order to bring the war to a conclusion on our terms.

Old definitions of the BRAVO Objective called for intelligence estimates of the physical damage done to enemy resources by our air action, without much regard to the time factor or precise measurements of his immediate operational capabilities. Such estimates might say, for example, that attack on a certain target system is expected to destroy 80 percent of enemy bomber aircraft, 40 percent of his fighter aircraft, 90 percent of his bomber bases, 60 percent of his aviation fuel, and so on.

However, if the aim is to put an immediate stop to his atomic attacks, intelligence must measure the degree to which they are in fact stopped by our countering action. We need to know how many fewer weapons he delivers or sorties he flies by reason of our counteraction than he would have without it. An

estimate that attack on a system of targets would destroy all enemy nuclear storage sites, bomber bases, bombers, missile launching sites, and missiles *without an indication of the timing of the attack relative to enemy use of these resources* provides no indication of whether the enemy delivered none or 100 percent of his nuclear weapons. Determining the degree to which enemy operational capabilities were affected by destruction of his resources requires consideration of where and when this destruction occurred. And this in turn requires consideration of our attack capabilities in order to estimate where and when we could effect such destruction.

If our recommendations for US actions are to be "consistent with the values of the US national strength involved," [2] we must determine what our strength will be at the time it is to be used, and we must consider attrition to our own forces from enemy attacks and defensive action. Further we must state this strength in terms of actual ability to deliver attacks under the operational limitations of weapons and aircraft availability, launching requirements, and navigational and bombing accuracies. Is it feasible for us to deliver a certain yield to a certain place in time to interfere with enemy attacks being launched?

Is the objective to stop enemy *delivery* of weapons rather than to stop launchings? If so, then the effects of our air defenses on launched enemy weapons must be determined, and intelligence should measure separately the attrition the enemy suffers at the hands of our defensive and offensive operations. We shall need to stop further weapons delivery after large numbers are airborne and even after large numbers may have been delivered, and this objective involves both our defensive and our offensive forces. Preventing delivery of enemy air weapons and preventing his resistance to our penetration of his airspace blend together; we cannot accomplish one without to some extent accomplishing the other. And all must be accomplished in the relatively short decisive phase in which overall air superiority will be attained or lost.

The targets of air attack can no longer be determined by static analyses of the effects of an assumed successful attack. Most of the key questions in current planning require analysis

[2] Lt. Gen. John A. Samford, *op. cit.*

of what happens during the period in which the attack is being carried out. The questions almost invariably involve measurement of the degree to which the attack can be successfully carried through. It is imperative that we have methods for providing measurements appropriate to such questions. The Air Battle Model provides an initial methodology for this purpose.

The Air Battle Model supplies measurements of specific capabilities and the extent to which such capabilities can be realized. Capabilities must be made specific to be analyzed. The statement of a capability to attack must specify with what kind of weapons, with what kind of success against air defenses, with what weapon delivery accuracy, with what scale of attack, with what degree of warning to the other side, and with what probability of retaliatory damage to the attacking side. This is to say that capabilities must be examined in terms of their individual components, and expressed as plans to use available resources in specific ways.

The basic Objective therefore requires an intelligence analysis of target systems with the following characteristics:

1. It must be two-sided, and short-term effects of one side's operations on the capabilities of the other side must be taken into account as soon as they occur.
2. It must be dynamic; the constantly changing short-term net capabilities of both sides must be continuously estimated and recorded, giving a chronological history of the war.
3. It must examine specific plans for use of resources in order to measure the degree to which specific capabilities can be actualized.
4. It must interrelate offensive and defensive capabilities of both sides.

Such an analysis of the air battle also meets the need generated by many particular problems in strategic and tactical planning. Over the past several years there has been an ever increasing demand for estimates of the effects of attack on target systems in order to plan missile and manned bomber mixes and deployments, base hardening and aircraft dispersal or evacuation policies, weapons stockpile configurations, the use of decoys, and other penetration plans to minimize attrition.

On these and many other questions alternative decisions are weighed against each other in terms of their effects on the air battle.

The planner wants to know: If I make this decision rather than that one, what difference in effects can I expect in case of war? Further, although I am considering this course of action to obtain a specific effect in a specific area, I cannot clearly see just what other areas will be affected or to what extent they will be affected. What other fields are affected by my decision? In addition, I need to know how confident I can be in the estimates of effects on which I base my decision, and this confidence must be estimated from at least two points of view. First, since chance and real-world uncertainties would result in differing effects each time I tested my decision, what is the degree of probability of a particular effect? Secondly, since a variety of conditions may obtain in a real-war test of my decision, I need estimates of its effects under a variety of conditions.

These questions carry a number of implications for the intelligence analysis designed to answer them. First, there is an implied need for a "big picture" analysis. The planner needs to see clearly where the decision under study fits into overall plans. The analysis should assist him in determining both pre- and post-hostility effects of his decision. Suppose, for instance, that our planner is concerned with the possibility of pulling back some overseas tactical forces into the United States to improve their mobility for limited wars. A typical pre-hostility problem would be what effect, if any, this redeployment would have on the role of overseas bases for wartime deployment of both tactical and strategic forces. What load changes on them may be expected? A post-hostility problem would be whether the TAC withdrawal would allow a significant change in Soviet concentration of effort on SAC pre-strike deployment bases. If the planner can review his problem in the light of an overall analysis of the key points of most of our war plans, then his decision is much more likely to be the right one.

The second, and more frequent, need is for comparative results of alternative decisions. The planner needs to be able to estimate effects while holding all facets of the problem con-

stant except those linked with his decision while varying others which might influence the effect of his decision. For example, a decision made for the current time period may be carried over into a future period in which many of the factors bearing on its effects may have changed.

Comparative estimates are required of the effects of a decision as varied by chance factors and estimates of the probability of any one effect. Chance elements are bound to be introduced in bombing errors, navigational errors, mechanical failure of aircraft, misinterpretation of radar scopes, inaccurate interceptor firing passes, and many other unplanned events. These affect the results of attack on a target system. If a certain battle is fought and refought many times, always with the same initial conditions, then on the average there is a most likely outcome of the battle, and on this most likely outcome the planner of the past would base his decision. But if a battle is to be fought just once, it is not enough to know only what the most frequent result in a series of such battles would be. The planner should know what the range of error associated with a certain predicted outcome may be. A plan which has a lower predicted probability of success may also carry a narrower range of possible outcomes, the worst loss being not so bad as that associated with another plan in which the most probable result is more favorable.

To answer the planner's questions, intelligence working with others must provide comparative estimates under many different conditions. Certain uncontrolled factors which must be assumed may have a significant influence on the effects of war. For example, the time of day of the initiation of hostilities, the time of year, the weather, and many conditions which the enemy controls will require assumptions for analysis of a war situation. The planner should know whether or not such assumptions influence the results of his decision, and if so, to what extent. Although some conditions are more likely to obtain than others, in many cases it is extremely difficult to estimate the probabilities of occurrence. Comparative estimates of effects under alternative conditions must be made.

There is always uncertainty in estimates of the precise types, quantities, and characteristics of resources available to the enemy. In determining the effects of his use of these re-

sources, it is not enough to take the "most probable" estimate of what they are. The variation in effects with the differing sets of resources of varying probability must be determined. For example, the degree of accomplishment of the BRAVO Objective will certainly be influenced in 1960 by whether or not the Soviets have an operational ICBM. They may have none; they may have 100. It is necessary for us to take both extreme cases into account in estimating the effects of war in 1960.

One other requirement for the air battle analysis involves the operation of chance on enemy plans. Enemy plans do not represent the threat he presents until they have been degraded by chance operational constraints. Chance (or nature) is the first antagonist of war plans. As previously noted, chance enters into air operations in many ways — bombing errors, navigational errors, equipment malfunctions, etc. As a result, the threat presented by a series of plans will always amount to something less (or at least different) than the plans themselves. There is a need, therefore, for one-sided gaming of planned use of resources in order to estimate an actual capability to use these resources without interference from enemy action. This degraded threat may then be used as a base on which a two-sided game can measure the effectiveness of counteraction in reducing the threat.

Description of the Air Battle Model

The Air Battle Model programs a high-speed computing machine to simulate about three days of a two-sided strategic air war. It is completely mechanized in that, after the inputs are fed into it, it works through the air war in great detail, writing up its history as it goes along.

If you think of the Model as a kind of black box which will do our war gaming for us, the inputs fed into it may be viewed as the terms of reference of a problem. These terms of reference must describe what war resources are available to each side, what courses of action each will attempt, and the characteristics and conditions determining the results of interaction. Two different kinds of data are fed in for each problem to be gamed, one representing the quantities, location and status of the offensive and defensive forces of both sides, and the other roughly the strategies (intentions and plans) of both.

For each side the inputs include offensive base information, defense installation characteristics, aircraft lists, target lists, and finally, plans for offensive sorties. In addition, the black box itself has a set of parameters, a constant part of the Model, which define the effectiveness of the defense against bombers, register the aircraft characteristics and support requirements, calculate the weapon effects against resources, and determine the way in which the plans are to be used.

The Model looks at the air battle at certain specified time periods, perhaps every fifteen minutes of real time. It takes a look at the situation at the beginning of the first fifteen minutes and asks what would happen during the next fifteen minutes. It starts looking at one side, say the US side. It looks at all the information characterizing it and computes what would happen in the next fifteen minutes. It then looks at all the information characterizing the SU side and computes what would happen in the same fifteen minute period. It now asks whether the game time has ended. If not, it raises time one fifteen-minute period and starts the cycle over again. This cycle continues until a time predetermined as the last period of interest. The two-sided interaction is simulated in the cyclical process by feeding data on the SU defense installations and targets into the US side and data on the US defense installations and targets into the SU side.

In view of limitations on the amount of rapid-access memory available in a high-speed computer, the Air Battle Model was developed with five major parts — five major operations which together make up the substance of the air battle. Each of these parts is a separate routine on the computer. The computer can therefore use its full memory on each, and can retain all the information necessary to carry out the operations of one particular routine. At the end of a routine, the data stored in the high-speed memory is dumped onto a magnetic tape, and the new data needed for the next routine is "read" into the memory from the tape. Since the Model is two-sided, the routines must all be carried out for both sides in the battle. When all five routines have been carried out for one side, the machine switches over and carries out the same five for the other side for the same time period. The five routines by which the machine simulates the air battle are:

(1) cell handling, (2) attrition, (3) cell forming, (4) targeting, and (5) damage assessment.

A "cell" is a homogenous group of aircraft in flight, belonging to the same type, taking off together, flying at the same speed, carrying the same weapons and the same amount of fuel, having the same fuel consumption rate, etc., and having the same general destination. Planes on the ground at a base, on the other hand, are treated as individuals for the sake of flexibility in simulating ground support operations.

Routine 1 — Cell Handling

The Cell Handling Routine is concerned with in-flight plans given each cell. The in-flight plan tells the machine what route a group of planes is to take, what the choice of flight altitude and speed is to be, and what the planes are to do along that route. It gives the coordinates of a point along the proposed cell route and specifies the operation (*subroutine* in Model terminology) to be executed at that point. There are twelve of these subroutines simulating aircraft operations, any or all of which may be used. They are:

1. *The land-at-a-base subroutine.* This provides for landing the cell at a specific base, if the base is operational. If it is not operational, there are two alternative in-flight plans giving the choice between flying on to another base or landing in an area.
2. *The land-in-an-area subroutine.* This provides for landing the cell at the best equipped base in an area of specified size.
3. *The splash subroutine.* This means either a crash landing or that all the aircraft in a cell have been destroyed so that the cell itself no longer exists.
4. *The refuel subroutine.* This specifies the procedures, waiting time, and further instructions to be followed when either a bomber cell or a tanker cell reaches an aerial refueling point.
5. *The dogleg subroutine.* This provides for a change in direction or mode of operation of a cell. The latter may be a change in altitude or speed, for example.
6. *The rendezvous subroutine.* This allows, where feasible, simultaneous penetration of enemy defenses by several cells.

7. *The target assignment subroutine.* This sets up a procedure to simulate specific selection of a target for each bomber.
8. *The branchpoint subroutine.* This permits several cells to use the same in-flight plan up to a branch point and then to separate, each taking one of two exit routes according to a prearranged system.
9. *The target point subroutine.* This simulates bomb drop at bomb release line, recording the number of bombs dropped in a target area.
10. *The intelligence communication point subroutine.* This simulates communication of intelligence to friendly forces concerning whether or not a target has been bombed and concerning potential targets.
11. *The orbiting for evacuation subroutine.* This provides for keeping a cell of planes which have been evacuated from a base under threat of enemy attack in an orbit pattern in the vicinity of the base. The original take-off to evacuate a base is automatic if evacuation is desired.
12. *The decoy release subroutine.* This provides that at some specified point aircraft in a cell may release decoys.

Routine 2 — Attrition

The attrition routine is concerned with the loss of bombers to local defenses (surface-to-air missiles) and area defenses (fighter interceptors), taking into account the effects of electronic countermeasures (ECM) and of radar. In beginning the attrition routine the machine makes a check to find a list of bomber cells and defense sites close enough to each other so that there is a chance of interaction between them. Then for each possible interaction it determines whether defensive plans and resources available would result in an offensive-defensive duel. If a duel would result, the probability of bomber and fighter kills is determined. The number of planes shot down is then calculated on the basis of the kill probabilities.

In interactions with local defense missiles, the machine takes into account the number of missiles directed against each plane and the ECM characteristics of the plane in computing aircraft kill probabilities. Then it determines how many planes have been shot down by matching random numbers for each plane against the kill probability (the Monte Carlo method),

and revises the cell records accordingly. If a plane is shot down while carrying a bomb and there is a probability that the bomb will go off, the computer uses the Monte Carlo method again to determine whether the bomb explodes and computes a chance location for the bomb to fall in.

The term area defense is used to describe the operation of fighter aircraft assisted by radar. Three operating modes are distinguished for each radar type: search, broadcast control, and close control. In search, the defensive aircraft operate with no guidance from the radar other than the information that offensive aircraft are in the area. At intermediate ranges, broadcast control is furnished the fighters. This means that they are given the position of the offensive aircraft but are not vectored to their targets. At close ranges the fighters may be given close control, that is vectored to their targets. These three modes of operation are introduced explicitly in the Model as three levels of probability of killing a bomber.

The close control capacity of a radar is given as a specific number of close control channels and a specific number of fighters that can be controlled by each channel. So far as possible, each fighter cell is given a channel of close control. However, if there are not enough close control channels to go around, the superior fighters are given the available control channels and the rest are sent up on broadcast control. On the basis of the amount of control, the type of fighters and bombers, the ratio of fighters to bombers, and the amount and type of ECM (which serves to reduce the control) present, the computer makes a Monte Carlo determination of how many bombers and fighters are shot down. If there is a chance that the weapon aboard a shot-down bomber may explode, the Monte Carlo method is applied to determine whether there is actually a ground zero and what its location will be.

Routine 3 — Cell Forming

The cell forming routine incorporates the planner's decisions as to how operations are to get under way. These decisions are put into the computer in the form of initiating plans, instructions to the machine to form cells at some time with some number of planes of a particular type carrying specified weapons. Instead of asking a particular number of planes from a particular base to go to some particular place at a particular time,

the input chooses an "initiating point" at which planes for a cell are to gather. The initiating point may be any convenient point on the route to the cell's destination. The initiating plan specifies a time interval, rather than a particular time, at which the cell is to be formed, and specifies a maximum and minimum, rather than a particular number, of planes for the cell. Planes are to be drawn from any base within a given radius rather than from a specific base, with the limitation that they must be drawn from a particular unit — roughly a wing.

If there are enough planes available and if it is time for a plane or cell to take off, the machine automatically writes what is called an implementing plan to get the planes to the initiating point. Each time a plane becomes available, the implementing plan sends it off to the initiating point. If now is not the time for the first plane to take off but the plan is feasible, the machine waits and tries it again in the next time period. Sooner or later, when conditions are right and the time comes for the first plane to take off, the implementing plan will be written and the cell formed.

Another aspect of the cell forming routine is concerned with aircraft maintenance on the bases. The computer, as part of its record-keeping function, maintains what is called a base list. The base list gives for each base the number of runways, the maximum length of usable runway, the amount of above-ground fuel, the amount of below-ground fuel, the number of hydrants, the number of maintenance slots available, and the number of different types of weapons in the weapons stockpile. Treating each plane on an individual basis, the machine determines whether it needs maintenance, bombs, or fuel, and furnishes them if they are available. It calculates the time needed to perform these operations which keep the aircraft out of action. Airbase inventories of fuel and bombs are reduced accordingly.

Routine 4 — Targeting

The major product of the targeting routine is a list of ground zeros for each weapon reaching bomb release line. These ground zeros are obtained by taking into account the radius of probable error for each of the types of aircraft and the mode of delivery for each weapon reaching target point. By the Monte

Carlo method a precise point of burst is obtained for each weapon. The targeting routine also takes into account the possibility of a gross navigational error. A determination is made by the Monte Carlo method as to whether there has been such an error, and if so a random target is selected for the bomb release point.

Routine 5 — Damage

The damage routine calculates the effect of bombing on military installations. It considers nuclear weapon effects in two categories, blast and radioactive fallout. Different blast effects are used for air burst and ground burst. The effect of fallout is to make installations inoperative while it is above a certain tolerance level. Blast damage is calculated for each installation close enough to a ground zero to be affected. Each type of air defense installation has an appropriate kill radius measured from the ground zero. If the installation is within the kill radius it is destroyed.

Offensive bomber bases are treated in more detail. Each of them has a geometrical array of points which represent existing runways, parkways for planes, maintenance facilities, above-ground fuel storage, hydrants, and bomb storage sites. When a weapon explodes in the vicinity of a bomber base, the amount of damage to the various facilities and to the planes which may be located at those facilities is determined on the basis of the appropriate kill radius, and the status of the base is revised accordingly.

Application of the Air Battle Model to Air Targeting

Assuming that a war situation has been set up as needed for model runs, how would the runs be made, what products would result, and how would the outputs be used? How can resulting estimates be applied to targeting problems? We know that war gaming will only provide an idea of how things might go in a war under certain assumed conditions rather than provide an estimate of how the war will actually go. Results will be only comparative among themselves — that is, we will be able to say that one type of attack is probably better than a second under certain conditions, whereas the second may have better effects under different conditions.

The results will not be indicative of how war will go for at least two reasons: first, because we know that our inputs are of

tenuous validity, and second, because certain result-determining conditions must be assumed and will never be explicitly analyzable. This is to say that the detailed results of single runs will rarely be meaningful; results can only be significant after consistent occurrence in many runs. For example, loss of all facilities at Thule Air Force Base during the first few hours of war becomes useful information only when it can be shown that it occurs most of the time under chance variations and under a variety of Soviet strike plans.

Conversely, aggregate measurements of effects will be of greatest significance for any one set of inputs. The status, eight hours after initiation of US operations, of the 25 key Soviet staging bases for attack on the US will be more meaningful than the status of the Anadyr airfield. Because aggregate measurements will be of such significance, the Air Battle Model has been programmed to provide certain of them for each time period. First, aircraft counters for each time period record the number of aircraft killed on base, the number killed by abort, the number killed by local defenses, the number killed by area defenses, the total number killed in flight, and the number arriving over enemy territory. Second, installation counters record the number of bomber bases killed (inoperative because of damage), the number of surface-to-air missile sites killed, the number of radars killed, the number of bomber bases out from radiation, and the number of radars out from radiation. Third, a counter of ground zeros records the number of offensive weapons exploding each time period. Fourth, new cell counters record the number of cells and the number of bomber and tanker aircraft taking off each time period.

A typical use of these counts might be to indicate the effect of different degrees of warning, different intervals of time between the start of aggression by one side and the awareness of it by the other side. This problem is set up with the resources and plans of both sides fixed, leaving as the only variable the interval between the times the two sides start to implement their plans. Playing through the problem several times with the warning time set at different values will show the effect of warning on the number of aircraft killed, on the number of cells formed, on the status of installations, and on the number of weapons delivered by each side.

These aggregate counts provide indications of how the war is going and to what extent the air battle objective is accomplished in each period. Much more detailed information is needed, however, for analysis of why things are going as they are. For this purpose other measurements are now programmed for the output of Air Battle Model runs. Whenever a cell reaches initiating point or performs an in-flight plan, information on the nature of the cell and what it is doing is recorded. A ground zero list by time period notes the unit number, cell number, bomb size, and location of each ground zero during the course of the game. Various presentations of these data would permit large-scale analysis of the air battle in any significant area or group of areas of the northern hemisphere. It would show by area and by time, for example, the level and type of air activity, the build-up of enemy aircraft within the area, the attrition of incoming enemy aircraft by defenses in the area, the weapons delivered by enemy bombing and the explosion of weapons shot down, the effects of enemy flights and bombing on the planned operational schedule of friendly forces in the area, and the effects of enemy bombing on offensive and defensive facilities.

One of the major problems of the Air Battle Model lies in the vast quantities of data it generates concerning the history of a war. Selection and presentation of only a small portion of possible outputs is required for practical use. Careful review of many study problems over a long period of time will be required to provide assurance that most of the pertinent available measurements are saved and recorded in usable form. Manual review of even those outputs described above would be too time-consuming for practical use, and mechanized presentation procedures are now under development. The comparison of the outputs of different runs is also expected to be time-consuming. A methodology for such comparisons, aimed towards mechanization, is now under development. Similarly, the results of many runs will need aggregation for purposes of hand analysis, since the computer can grind out results (e.g., ground zero patterns) much more rapidly than they can be reviewed.

With the preceding background in mind, let us examine the kind of Model runs that will be needed. Remember that the basic purpose will be to estimate the degree of accomplishment

of the air battle objective achieved by our selection of targets and target systems, and the major subpurpose to estimate the influence of a planning decision or a group of planning decisions on the outcome of a battle for air supremacy and survival. And bear particularly in mind that our confidence is high only in the *comparative* results of war gaming.

There are four broad types of Model runs required for these purposes. First, one-sided runs with all input data constant will indicate the operational limitations on each side's plans and segregate the offensive and defensive problems faced by each side. These runs will show the unopposed capabilities for each side, providing a basis for estimating in later runs the extent to which the other side can interfere with these capabilities. Second, one-sided and two-sided runs with all input data constant will determine the chance variations both in the unopposed execution of plans and in the interaction of forces of the two sides. Third, runs with variations in one or more input parameters will determine the sensitivity of results to a range of values for assumptions and low-confidence estimates. Fourth, runs with basically different sets of inputs will compare significantly different strategies and force availabilities.

In refinement of the first type of run, a great deal can be learned about an air battle through a series of runs of one problem with fixed inputs except for the use by one side or the other of its offensive or defensive capabilities, or both. There are seven meaningful combinations of these conditions. In the first two cases only the offensive capabilities of one side are represented, with no defense or offense by the other. Such runs measure the maximum effectiveness of that side's given operational plans. Case three is a full scale two-sided run, in which both offensive and defensive capabilities of both sides interact. By comparison with cases one and two it measures the extent to which the offense-defense and defense-offense interaction reduces the maximum effectiveness of each side's plans. In the fourth and fifth cases the offense of one side is pitted only against the defense of the other. These measure the maximum effectiveness of each side in the absence of offensive effort by the other, and comparison with the full scale two-sided run (case three) gives a measure of the extent to which the offense of one side reduces the effectiveness of the other's offense. In

cases six and seven one side only does not defend; the results may be compared with case three to see to what extent the defense reduces the effectiveness of an attacker.

Before we can compare the influence of different decisions on the outcome of an air battle, we need runs of the second broad type to determine the influence of chance on the outcome for each decision. We know that a specific attack against a specific target system may have a wide variety of possible effects, depending upon precisely which aircraft get through to which targets and when, and which aircraft bomb accurately and which inaccurately or with gross error. Information will be required as to the effect of such chance distributions on many of the basic outputs. Since the Air Battle Model employs Monte Carlo techniques to simulate chance events, a series of runs should be made on each set of inputs with different sequences of random numbers to obtain different chance results. All other conditions should be held constant. Statistical analyses of the distribution of the chance variation in results will determine the spread which may be expected with one set of input conditions and indicate how much confidence one can have in a particular outcome.

The third type of run analyzes problems with variable basic conditions. The effects of any particular planning decision must be reviewed under varying basic assumptions and conditions. These analyses will generally not require revision of basic terms of reference or input sets, but will be effected by changing one parameter value at a time; values higher and lower than "best estimate" values will be used for the parameter under study. These parameter variation runs will show the effect on the outcome of the battle of variations in the speed of bombers, effectiveness of use of radar and ECM, bombing accuracies, time of year and time of day of starting hostilities, reaction time after warning, weapon yields, aircraft evacuation policy for bases under attack, personnel evacuation policy for bases under radiation hazards, and many other factors.

Study of parameter variation effects combined with analysis of the effects of chance will require many runs. Fortunately, it is possible with the Air Battle Model to rerun problems with the same random number sequences for the simulated chance events. It is possible, therefore, after determining which sequences of random numbers yield for example very lucky,

medium and very unlucky results on a problem, to use these same sequences again to obtain the lucky, medium, and unlucky results of a parameter variation for the same problem.

The results of parameter variation runs, incidentally, offer a tremendous feedback for establishment of intelligence collection and analysis requirements. They indicate the sensitive conditions and inputs on which estimating capabilities should be concentrated. If ECM effectiveness has a significant influence on the effects of the air battle, then priority efforts should probably be devoted to the study of enemy ECM capabilities. Conversely, if a plus or minus 30 percent variation in the speed of bombers has little or no influence on the outcome of the air battle, then attempts to refine estimates of bomber speeds should be given lower priority. Similarly, the runs indicate the sensitive operational considerations which are the key terms of reference in planning estimates.

The fourth type of runs will be required for analysis of "big picture" problems. These require basically different sets of inputs. Variant data reflecting capabilities at short, intermediate, and long range must be used. Several different enemy courses of action should be examined for each time period, and at least one countering US course of action for each. Several US target systems and target system priorities coupled with differing US strategies based on varying amounts of warning should also be studied. Some of the other plan revision factors important in this study are weapon constraints (such as nonuse of surface-burst thermonuclear weapons in certain areas of the world), US weapon deployment at initiation of hostilities (in the Zone of the Interior only, or also overseas), delivery force sizes for both US and SU, delivery force structures (including missile-bomber mixes), and Soviet offensive aircraft deployment (at peacetime bases in one case and also at advance bases in another). The formulation of input sets for such studies will take a long time, and our ability to perform these studies in the future will depend upon the programmed development of such input sets.

The Air Battle Model is designed to evaluate the operational and logistic factors bearing on the identification and analysis of a target system for our strike forces. The specification of such a target system, with full assurance that we have the

right targets and the right weapons on them at the right time under varying operational conditions, exceeds the capabilities of the best analysts and planners. Human minds cannot keep the thousands of facts and relationships under analytical control and see them as they affect the whole problem. For these reasons we have been pressing the development of this mechanized analytical technique. The Air Battle Model appears to offer the best solution now available to some of the important problems air targeting must solve.

Collection practices are critically reviewed from the standpoint of the middleman by a State Department expert.

SOME VIEWS ON THE THEORY AND PRACTICE OF INTELLIGENCE COLLECTION

Stanley E. Smigel

Intelligence collection as here discussed is a broad service and support activity. Its principal service, of course, is procurement of material for the intelligence analyst-producer's mill. To meet this responsibility, intelligence collection seeks out information on countless facets of subjects political, economic, scientific, cultural and military. In form this information may be press clippings, books, reports, maps, photos, samples of grain or oil, radios or machine tools, identity documents, or reproductions of industrial markings.

This article will deal principally with that part of the intelligence collection activity which is done by the headquarters organization. Obviously, one key responsibility of the headquarters unit is the organization, maintenance, coordination and direction of the actual collection and reporting operation in the field. Other important service and support activities are performed and these will be pointed out. Because the precise responsibilities and activities of the various headquarters units vary, we shall discuss instead the more important functions of a typical headquarters collection specialist. The emphasis is placed very largely on overt activities; little will be said of clandestine collection.

The Job of the Headquarters Collection Specialist

Let's look first at the comparatively well known and obvious services and practices that may be expected of the good collection specialist. He is, of course, expert on the sources which might be used in filling a given requirement. His experience in handling many requirements also enables him to use the most suitable collection form. On occasion, for example, an official-informal letter to the first secretary of the political

section of a mission may be more productive than a routine instruction which is technically directed to the ambassador. The language and tone of an instruction, important for comprehension and sympathetic reception in the field, can usually be improved by a competent collection specialist. By checking with other analyst-producers (or agencies) in Washington who have an interest in the country or subject, he can often make significant additions to the original request, to the advantage of all concerned. Other generally accepted activities of the collection specialist include securing the necessary clearances for an outgoing instruction (providing justification where necessary), expediting transmission to the field, keeping records of requests and replies, etc.

There are other services and practices of the collection specialist which are less well known and are not obvious. For example, he does not send to the field for collection every requirement he receives.[1] The requirement must be appropriate for his collection agents. A foreign service officer is not ordinarily asked to do covert collection, nor is he asked to handle military subjects when military attaches are part of the mission. The collection specialist doesn't, moreover, transmit a request for assessment of reported flood damage in an outlying province when the political pot in the capital is boiling and all hell may break loose at any moment. The request for flood damage reports may come from an *economic* analyst-producer interested in what harm has been done to food crops or to important transportation links. The request, valid though it may be, must await its time. The political scene demands priority. Transmission of the economic request when received would very likely irritate or frustrate the field unit.

But not all requirements framed by analyst-producers are valid. Occasionally a collection request will ask for information that has already been reported by the field and is resting within easy reach of the requestor. If such a request slips through the collection specialist's screening mechanism the field reaction is always prompt and generally acidic. And the

[1] A Bureau of the Budget survey (circa 1950) disclosed that 1 in 6 requests processed through the Department's Intelligence Bureau was either rejected or altered in major fashion to suit circumstances or capabilities in the field. It gave warm approval to this activity.

taste lingers on for a long while. The requestor, of course, feels like a worm resting under a flat rock which has suddenly been removed. First blush reaction is that if the post never reports again, it is only the just dessert earned by the requestor. But what of the dozens of others who are also interested in information from this post? Their interests cannot be ignored, should be promoted, and, where necessary, must be protected.

A good collection specialist, although the servant of Washington consumers, must be alert to circumstances in the field. In the overall picture, he does his Washington consumers a disservice if he is not. When a post is substantially reduced in strength by illness or loss of personnel, normally valid requirements become marginal or submarginal. A change from a friendly to a hostile government makes the task of a foreign service post immeasurably more difficult. The most commonplace answers may be found only after much digging and perseverance. Requirements must, therefore, be screened carefully. Other possible collection avenues must be scouted. Solid "justifications" must stand behind all outgoing requirements. Collectors and analysts alike should be on the alert to provide such a post with information that appears outside of the country concerned but is not readily available inside. This practice is not only a courtesy but by keeping the field unit informed maximizes its collection potential.

A difficult and not uncommon problem for collection specialists can be illustrated by a hypothetical case. The foreign service post in Lower Routinia cables Washington:

Rumors are rife that members of the armed forces, incensed that pay-increases and other concessions have not been granted, are threatening to overthrow the central government. Air Marshal Schwarzbart is reported leading this group. The Minister of Defense has broadcast a statement denouncing rumors that are being spread by "traitorous, self-seeking elements" and assuring the population that any attempt against the government is unthinkable, but that if it comes it will be "smashed by the ever-vigilant, loyal armed forces." The police guard around the Capitol buildings has been materially strengthened.

Within hours after receipt of this cable the collection specialist receives a requirement, for "immediate" transmission to the field, as follows: 1) What important military figures are supporting Marshal Schwarzbart? 2) What is the position of the Navy? The Army? Are they supporting the Air Force? To what extent? 3) Is the incipient revolt primarily one by the young officers group? 4) Are there any influential civilians or civilian groups supporting the Air Force group? 5) Any other pertinent information on scope, timing, probabilities and personalities is desired.

Basically there is nothing wrong with this requirement. It represents information in which the requestor has legitimate interest. But the timing is all wrong. The requestor's interest—even excitement—has been aroused by a report from the field. That the field is reporting on the subject and that they reported by cable indicates their awareness of Washington interests and their recognition of the importance of the subject. Had the field possessed any additional significant information this would undoubtedly have been included in the cable. The *only* reasonable assumption is that the field is concentrating every effort to secure and report additional information. Everything on the subject will be reported. To single out certain elements and cable them to the field may a) attach unjustified priority or importance to these elements which in retrospect may be found unjustified, or b) may, as here, stress the obvious and thus not only be superfluous but may be considered by the field unit an unjust reflection on its intelligence.

In the circumstances of our example, overwhelming experience counsels patience and waiting; the boys in the field know what they're doing. If after a reasonable period no further reports are received, the transmission of the requirement would be justified. An *immediate* instruction to the field would, however, be justified if the field report indicated a) ignorance of significant information available to Washington from other sources or b) significant misunderstanding or erroneous assessment.

The foregoing covers the work of the collection specialist on what are commonly termed "spot" or *ad hoc* requirements. A less dramatic but important collection function is the compilation, and constant revision, of the standing or basic intelligence instructions. These are the manuals, the collection instructions, the intelligence plans, the periodic guides, etc.[2] They tend to be lengthy and encyclopedic in contrast to the generally brief character of the spot instruction. The general inclination in the intelligence community is to turn up one's nose at these pieces. In point of fact, if they did not exist and were not periodically revised there would be a gap which would frequently be keenly felt, for basic or standing instructions play much the same role in the intelligence collection picture that the National Intelligence Survey (NIS) plays in the production scheme. The periodic revision of these basic pieces provides an occasion for the introduction of new concepts as well as the dusting off and refurbishing of the old. More general, less urgent than the *ad hoc* requirement, there is still room in their construction for hard thinking, imagination and the application of perspective on the part of the collector.

Before we proceed to the non-collection duties of the collection specialist, a word of clarification is in order with respect to "requirements officers" and their role. As their name implies, these officers busy themselves primarily with requirements, which are the expressed informational needs of intelligence analyst-producers. By example and exposition, however, we have shown that the collection specialist performs a full-scale requirements function. Requirements officers, therefore, may be collection specialists under another name. More often, however, the functions of a requirements officer do not reach the full scope of those of a collection specialist but are limited to consolidating the requirements of the analyst-producer. The establishment of requirements officers is thus a fractionalization, and frequently a decentralization, of the collection activity.

If the requirements officer is too close organizationally to the analyst-producer, especially in a dependent relationship, there is danger of his becoming a sort of bat-boy for the analyst-producer. This kind of requirements officer frequently has too little concern for the merit, timing, or priority of the requirement he shepherds. Getting a collection request sent to the field may on occasion be even more important than the reply.

[2] See for example: U.S. Naval Intelligence Manual (ONI 70-1) Nov. 4, 1957; Department of the Army Intelligence Plan (DAIP) Dec. 1957; Army Intelligence Collection Instructions (AR 381-25) March 1956; Foreign Service Manual, Vol. IV, Chapter 900 (Intelligence).

The above collection or requirements activities of the collection specialist occupy somewhat less than half his time. His other duties include two broad categories, liaison and staff work, and a host of other jobs such as: processing clearances and declassifications; arranging briefings and debriefings; conducting intelligence exchanges with representatives of foreign countries; administering evaluation programs of individual reports and overall performances; supervising distribution and reproduction; arranging trips to the field; assisting in assignments to the field; handling funds and fiscal records; procuring special equipment for the field; assisting in orientation and training.

Collection is inseparable from liaison. That is, while not all liaison officers are collection specialists, every collection specialist engages in liaison, some more than others.[3] Not infrequently the liaison activity is a formal one recognized and delineated by official regulations. Certain collection responsibilities are invariably included. On other occasions, liaison is carried out not as an official duty but as a logical means to gain the collection objective or further other activities.

The staff work that collection specialists perform (or can perform) includes studies on such topics as:

[3] The nature and scope of liaison are indicated by the following quotation taken from a Department of State draft memorandum (Unclassified): "Liaison officers . . . shall deal . . . on matters of interests to their respective agencies, such as the collection and exchange of information (or intelligence), the operating and administrative matters appertaining thereto, and the securing of such reciprocal assistance and services as are customary in general liaison activity. . . . In the performance of their duties, they shall procure for and provide to the Agency with which they maintain liaison appropriate information and assistance when not inconsistent with the obligations and interests of the Department; these services shall be extended as a general practice and in response to specific requests . . . Whenever practicable, business . . . will be conducted through designated liaison offices. Specialized subjects, however, may be handled by those familiar with them or directly concerned in cooperation with officially designated representatives. Moreover, interagency discussions and collaboration on policy and directly related matters by policy and executive officers . . . shall be carried out in such manner and channels as the participants deem advisable. This does not, however, relieve liaison officers of the responsibility of providing all possible assistance and service if called upon in such matters."

The Intelligence Potential of Foreign Service Consular Sections;

Relationships and Coordination among Collection Components in the Field;

The Use and Value of Intelligence Reports to (Selected) End Users;

Annual Evaluation of Foreign Service Reporting from an Intelligence Standpoint;

Emergency Instructions and Procedures Necessary to Put (Department of State, Army, etc.) Intelligence Activities on a War Footing upon Outbreak of Hostilities;

The Intelligence Potential of (Army, Navy, Air) Reserve Officers Residing Abroad; etc.

Some of the implementation of such studies rests logically in the lap of the collection specialist. And as he takes on these broad, responsible support activities, he finds himself doing a general secretariat activity for the intelligence chief and his associates.

The picture we have drawn of the collection specialist's operation is one of an extensive support, staff, and backstopping activity. This is properly so. Although a seeming contradiction, the collection specialist is a generalist, a jack-of-many-trades. This role is a logically derived one. He exists in the first instance because most analyst-producers if left to their own devices would fumble the mechanism of collection. Some would fail to think out their needs, thus falling short on the substantive aspect. Other analyst-producers need to be prodded, else any collection effort for them or from them is apt to be too little, too late. The very resourceful, highly talented analyst-producer can approach the collection specialist in efficiency and results, but it would be poor use of resources to occupy his time in collection except where no substitute were possible.[4]

[4] As indicated, we do not imply that the collection specialist should do all collection or that the analyst-producer should do none. The analyst-producer who visits a library or the industrial register or discusses an interest with some specialist in another organization is doing a necessary, almost unavoidable, collection job. Assignment of all collection to a collection specialist is no more sound or possible than the assignment of all security responsibilities to a security officer or all administration to an administrative officer.

By handling many different requirements from many analyst-producers, the collection specialist acquires a fund of general information. Because of his many contacts, he can make the imagination and sensitivity of one analyst benefit other analysts. His many contacts, his knowledge of the interests of others, his administrative ties and his essential spirit of service make him a focal point for people asking questions, seeking information or advice. So from the roots of collection and liaison, the activity builds into a broader staff and support function.

The Differences in Collection Organizations

The organizational command structure and the responsibilities of headquarters collection units in the intelligence community vary greatly. The differences are both significant and interesting. At one end of the scale are the military services. All the intelligence collection activities are under the pertinent intelligence chief. A collection instruction to the attaches in the field is drafted in the intelligence collection component, signed by the intelligence chief or a deputy, and proceeds directly to the attache. The attache in turn is directly responsible to his intelligence unit in Washington.

This pattern contrasts sharply with the command and structural relationship in the Department of State. In the Department, the principal collection arm, the Foreign Service, lies outside the intelligence organization. Instructions to the Foreign Service are drafted by the Intelligence Bureau, but, with small exception, these instructions must receive the approval and clearance of other bureaus before transmission. On the other hand, the approval of the Intelligence Bureau, again with small exception, is not required on instructions to the Foreign Service drafted by other bureaus. In contrast to the clear-cut responsibility the service attache has to his headquarters intelligence unit, the foreign service officer has responsibility to the Department as a whole and has indirect responsibility at best to the Intelligence Bureau.

The mission of every military attache and his staff is flatly intelligence, and very clear-cut. For example, the Department of the Air Force Instructions (Intelligence Collection Instructions (ICI) of June 1954, currently being revised) state that the primary function of the air attache is to collect and report

intelligence information. Speaking of this function, the instructions, moreover, admonish that "it is of such overriding importance that it must never be subordinated to representative or administrative duties." The U.S. Naval Intelligence Manual of 4 November 1957, speaking also on the collection and reporting function, instructs naval attaches as follows: "This task is so important that it should never be relegated to secondary consideration in favor of other duties." It would be difficult to issue instructions more precise and more categorical.

The Foreign Service, on the other hand, has no such instructions, for it is a multi-purpose operation. There are many Foreign Service posts (e.g., consulates) where 95% of the effort is devoted to passport and visa work, protection of American interests, seeing to the welfare of American seamen and the like. Intelligence is secondary at best and the small intelligence potential which does exist is largely unexploited. Reporting from these posts covers administrative, fiscal, and consular matters. Even in the political sections of American embassies abroad intelligence reporting must on occasion vie with representation for primary importance.

The military services keep a closer control of their attaches' collection activity than the Department of State does of its collection activities in missions and posts abroad. Military attaches are required to prepare intelligence collection plans and keep them current. Copies and revisions *must* be sent to Washington. These plans include information on the categories of sources and contacts, their value and extent of use, deterrents to collection, a travel plan, emergency plans, etc. The Foreign Service has no comparable collection instruction and obligation. A good portion of this kind of information, however, is reported piece-meal.

The undiluted intelligence nature of military attaches and the directness of the command structure permit an unequivocal statement of the highest interest and objective of the intelligence program, viz.: *"The primary mission of Army intelligence is, and for the foreseeable future will continue to be, the collection of information and the production of intelligence on the Sino-Soviet Bloc Nations."* [5] (Italics are in the original.)

[5] Department of the Army Intelligence Collection Instruction (AR 381-25), March 1, 1956.

The emphasis in Foreign Service instructions is not so pointed. Because of the multi-purpose nature of Foreign Service missions, the responsibility and orientation of each must be principally to the host country. In practice, however, it can be shown that for many posts this difference in orientation is more an appearance than a reality.

In the structure of military intelligence, counterintelligence and security are under the direction of the intelligence chief.[6] In the Department of State, the Intelligence Bureau concerns itself only with foreign positive intelligence. Security and counterintelligence activities are assigned elsewhere. The most amicable of relations exist between the two components, so that many of the positive intelligence fruits of counterintelligence and security are secured for the use of the Intelligence Bureau. From a theoretical standpoint, however, the military pattern is preferable in order that a) all, not *some*, of the positive intelligence data collected by counterintelligence become available, and b) one need not rely on a favorable informal relationship that can quickly change.

The CIA command structure and organization lies between the two poles represented by the military services and the Department of State. Covert and overt operations although separated are responsible to the same chief.

To sum up, some of the differences in organization and command structure of intelligence units reflect the different missions and responsibilities that exist. In the case of the Foreign Service, consular work, protection of and service to American citizens, reporting of economic and allied information for U.S. export-import and producer interests, and the like are important assigned functions, even if non-intelligence, which cannot be put aside. From a manpower and funds standpoint these are major activities of the Foreign Service. It is truly surprising, therefore, and greatly to its credit, that the Foreign Service continues to play the very important role it does in furnishing intelligence information to the U.S. intelligence community.

[6] In the Department of the Air Force, some security and counterintelligence functions lie under the Inspector General.

The Status of Intelligence Collection

It seems appropriate to conclude this article with some observations on how well intelligence collection has performed in recent years and some personal views and recommendations. Let's look first at the record.

The positive accomplishments of intelligence collection in the postwar years are numerous. Coordination in the field, in good part because of headquarters initiative and action, has improved markedly over that existing immediately after World War II. The Joint Weeka, for example, despite trials and tribulations, has become a very effective reporting instrument which is used and is highly regarded by end-users throughout the intelligence community. A number of programs, such as publications procurement, travel folder, exploitation of international trade fair opportunities, peripheral reporting, and the like, have been established and have proved successful—some more so than others. Periodic Requirements Guides and Periodic Requirements Lists have been useful stimulants and guides for field collectors. The worth and use of CIA covert reports has increased tremendously. From the days when the useful covert report was an exception, the point has been reached where they are truly a valuable portion of the material in the analyst-producer's in-box. Intelligence exchanges with certain allies have been established and operate smoothly. Procedures and methods have been established for effective day-to-day operations. A formal structure (committees, etc.) exists to consider and deal with community problems.

Intelligence collection has thus many accomplishments to which it can point. We are inclined to feel, however, that there should be more. In terms of results, collection has not developed apace with production since World War II. Intelligence collection has suffered from a lack of imagination and from too much formalism. The real gains that have been made must be weighed against the failures to initiate, to exploit, to innovate. Collection has been afflicted with a reluctance to assert itself or to try something new. There is too little seeking out of the end-user, analyst-producers and others, acquainting them with collection's service potential, making suggestions, stimulating. Too often collection waits for the analyst-producer to knock down the door. There is not enough informal interchange between collection personnel on solutions

to common problems, procedures, methods, projects contemplated, etc. To be sure, committees exist with responsibilities in the collection field. But these have formally assigned tasks, assigned participants, and do not take up the workaday, practical operating problems of collection itself.

Needless to say, the above observations will have imperfect and uneven application. Where they exist, the faults are not, of course, ineradicable. We would suggest that the following would go far to righting the situation:

1. Collection should insist on better access to the analyst-producer's thoughts. Capable collection specialists should sit, for example, as observers on lower and intermediate level substantive meetings on estimates and other studies. This would be a practical way of securing detailed, priority requirements. Post-mortems tend now to be broad-brush statements of informational inadequacies, and lack the detail which was available weeks earlier. The analyst-producer, having shot his bolt, is in no mood generally to recover this detail for the collector. We would venture to suggest also that the presence of a capable collector as observer could lead to other benefits.

2. Collection should recruit and select its personnel more carefully. Most of us, as average American motorists, have had the experience of driving an automobile into a garage because the engine, or something, was out of sorts. In seconds the garage mechanic had the motor running smoothly. Collection needs such mechanics. On the other hand, it would hardly be wise to ask that same mechanic to design an engine. An engineer is needed for that. Collection needs engineers, too. In the past, mechanics have been asked to do the job of engineers. This must be corrected. Both good mechanics and good engineers must be secured and be properly utilized.

Admittedly selection of personnel has been hampered by such factors as budget ceilings, salary ceilings on individual jobs, etc. In the long run, with a good case and persistence, these can be overcome.

3. Collection must insist on better support from the top so that it can carry out its programs and implement its ideas. Collection can earn some of this support by doing its job well and being constantly on the alert to assist its chiefs with staff and support work.

4. An effective exchange of collection personnel should be initiated within the intelligence community. It could be established as an adjunct to or within present exchange programs, whichever is more feasible. Consideration should be given not only to the training of the individual but also to the long-run improvement of the different collection organizations. The Intelligence Bureau of the Department of State, which does not take part in existing exchanges, should participate.

5. An intra-community training and orientation course exclusively for collection personnel should be organized. It would throw collection people together and establish ties which could be exploited long afterward. Lectures and course-work could serve to educate, to identify common problems and possible solutions, etc. Subjects which could be covered include evaluation and appraisal of reports, effective briefing and de-briefing procedures, requirements work, and headquarters collection organization. This training, and assignments within it, might provide the basis for community-wide manuals on various phases of collection—evaluations, liaison, briefing and debriefing, etc.

This recommendation and the one immediately preceding are obviously complementary. They are aimed at increasing the exchange of ideas and experience and at creating informal working relationships.

We have addressed this article to collection and production people alike. Collection is after all created for production. Without good collection, production soon tends to fall qualitatively or become sterile. Production has a distinct right—and responsibility—therefore, to point out inadequacies in collection and demand improvement. On the other hand, production is obliged to give reasonable cooperation in effecting this improvement.

As the intelligence product, the *raison d'être* of the community, becomes more mature, the point is reached where the additional qualitative improvement and refinement of the product depend principally upon the development of improved collection techniques and organization. There are doubtless some in the community who would maintain that we are at that point now.

A collection officer with an interest in big business urges better exploitation of a particular source of economic intelligence.

PERIODIC REPORTS BY INDUSTRIAL GROUPS AS SOURCES OF INTELLIGENCE INFORMATION

Charles H. Helsper

The major part of the world's economic and industrial activity is conducted by corporations, combines, associations, and other industrial-commercial groups which possess a corporate identity, engage in corporate action, and pursue corporate objectives. These identities, actions, and objectives are in aggregate decisive for the course of the free economies and not without influence in the controlled ones. Yet the intelligence community, for all the enormous effort it devotes to acquiring economic data, has not addressed itself to the systematic study of industry at the corporate level.

The basic source for such a study is provided by the periodic reports of the corporate bodies themselves. Their own statements about what they have done, are doing, and aim to do may need correction from other sources, but constitute at least the starting-point for this fundament of economic intelligence.

The corporate report has become increasingly reliable in recent years. There are many influences, industrial and governmental, which provide incentive for truthful corporate reporting. As a means for transmitting information to the frequently far-flung management of an organization, the corporate report has wide acceptance in financial and industrial control centers.[1] In the field of stock corporations the spread of ownership has required management to utilize the annual report as a mechanism for communicating with stockholders, who now participate more actively than ever before in determining the course of the corporate body.[2] Management has found it necessary to explain its actions in detail.[3]

[1] See Paul Douglas, *Communication Through Reports,* Englewood Cliffs, N. J., 1957, p. 315.

[2] *Reporting to Employees and Public on Profits and Productivity,* American Management Association, New York, 1946.

[3] "Giving Stockholders Their Day," *Business Week,* 29 June 1957.

The supervision of securities markets has also contributed to increased fidelity in corporate reports. They are now scrutinized in all major financial and industrial centers. International investment and banking houses are among the many powerful interests urging further improvement in their reliability.

What kind of information is contained in foreign corporate reports? They lack uniformity both as to subjects and as to wealth of detail, but do in aggregate contain a wide range of data; and their very omissions are often indicatory. Some of the things they cover are listed below.

Tie-ins: The name of the corporate body itself, the names of associated industrial and economic leaders, and those of subsidiaries and affiliates reveal inter-group tie-ins. Similarly data on contract relationships and stock ownership.

Production Statistics: Authentic plant statistics which could otherwise be obtained only by covert collection are often available here. Expected production goals may indicate forthcoming industrial shifts long before they become evident in trade journal articles. Production figures on the corporate level are frequently more revealing than consolidated national statistics.

Financial Data: Corporate reports are among the very best sources for all types of financial information. Changes of ownership, bank loans, and financial dictation and control are often revealed in the explanation of financial developments. Reports of top holding companies which include details on subsidiaries and affiliates in their consolidated financial statements may be the only source of information on these subsidiaries and affiliates. The report may betray a financially weak corporation, one ripe for Communist bloc penetration.

Area Development: Reports from the extractive industries often provide information on new discoveries and strikes of strategic and critical materials, data ordinarily difficult to secure. Corporate determination to exploit or not to exploit discoveries and the reasons therefor may sometimes be included.

Labor: Corporate reports reveal the relationship of owners, managers and controllers of capital to industrial labor, one of the most important aspects of modern industry. As the collective opinion of the leaders of industry these reports have greater weight than the attitudes expressed by individual officials.

Production Methods: The inauguration or development of new production methods often determines the major trends and movements in an industrial field. Corporate reports often comment on new methods which show promise, and thus provide insight into the confidential area of industrial know-how.

Markings: Industrial and commodity markings are increasing in use and significance. Corporate reports often provide markings information obtainable by other methods only at great cost.

Plant and Installations: The corporate determination to expand, replace, or abandon facilities is revealed, often with full explanation for the action, in corporate reports. Pictures of facilities and details of the structure and capacity of new plant units are sometimes included. Reported intra-plant reorganizations and additions may foreshadow radically new products or production methods based on some scientific break-through.

Trade: Past trading operations are often reviewed and plans and objectives of future marketing policies outlined, including plans for trade with and in the Iron Curtain areas. The expected results from such trade are sometimes included in the discussion.

General Policy: Some corporate reports set forth the group's policy on a diversity of subjects. Shipping companies may discuss policy relative to handling Iron Curtain cargoes or their plans for sale of bottoms to Iron Curtain countries.

Corporate reports as a source of economic intelligence have certain other advantages. Although their information is usually of a current nature, some of it is relatively basic. A study of railroad car markings in the Far East made in 1954 found its best lead to the markings system in the 1940 annual report of the Canton and Kowloon Railway.

Another advantage of the reports is their frequent availability in English, because of the predominance of the English-speaking nations in financial markets of the world. U.S. foreign aid programs and U.S. capital investment in foreign countries is broadening the practice of publishing reports in English as well as in the local language.

U.S. Government agencies and some private concerns have in past years devoted considerable scattered effort to the collection of foreign corporate reports, most of it unfortunately in different special fields of interest. The Comprehensive Economic Reporting Program (CERP) of the State Department is the most nearly systematic. But in its country programs, subject to review by many governmental agencies, corporate reports frequently fall by the wayside in the struggle among collection priorities. Its directives to the collectors in many countries contain little or no reference to the need for corporate reports. Some mention the name of a particular corporate report believed to be of value, implying that no others are wanted. Periodic reviews of CERP program results, however, frequently include recommendations for more corporate reports.

Military attaches have also collected corporate reports for limited periods and for special purposes, such as military equipment procurement programs. There is a lack of continuity and consistency in military programs requiring corporate level data which seriously limits military collection of this type of data.

The Securities and Exchange Commission receives a copy of a report whenever a foreign security is placed on a domestic securities market, and has acquired by this means a sizable collection. Its usefulness for intelligence purposes is limited by its fragmentary nature, by the necessity to keep it within the confines of the Securities and Exchange Reference Room, and by the fact that it is not indexed.

Industrial trade associations and city and state industrial libraries have shown considerable interest in corporate reports. But their files, located in New Orleans, San Francisco, or Chicago, are not readily available to the intelligence analyst. Frequently he may not know of the existence of reports in these libraries because not all special libraries index them.

Business travelers, both corporate representatives and private tourists, sometimes obtain corporate reports from organizations in which they have an interest. These become lodged in private files or corporation libraries and are unknown and unavailable to the intelligence community.

Business directory publishers and financial analytical services in the United States and other English-speaking countries

obtain many corporate reports. But their working files are private property containing much confidential information, and intelligence organizations can secure access to them only by courtesy. Dun & Bradstreet and McGraw-Hill in New York and Kelly's in London make their publications available, but these are rewritten and hence once removed from the statement by the originator. Moreover, the explanatory portions of the reports they receive are frequently excluded from the published manuals.

The Census Bureau has obtained certain reports in exchange for Census publications. The Export-Import Bank often secures corporate reports in connection with loan applications, and the Department of the Interior obtains reports from certain foreign mining, petroleum and other natural resource producers.

This variety of fragmentary collection mechanisms needs to be coordinated and supplemented in order to establish a consistent collection effort to assemble foreign corporate reports of all kinds for U.S. Government purposes. Collection costs would be low. Many foreign corporate reports can be obtained free on request. Others can be obtained by subscription from reporting organizations such as McGraw-Hill or Dun & Bradstreet or their European counterparts. The average cost per report should not exceed five or ten dollars.

At the very least those reports now received within the government should be collected into a central file. Research analysts could make use of a centralized economic library maintaining a file of corporate reports, just as the Military Services Medical Library now serves in its field all three military departments and other government organizations.

It is true that foreign corporate reports are of value primarily for intelligence on the free economies. But the interplay of these economies with those behind the Iron Curtain is a phenomenon of growing magnitude with the growth of the Communist bloc's aid-and-trade program, and corporate policies and plans in the free world may have much to do with the success or failure of that program. As the products of the Soviet industrial machine begin to influence conditions on the world market, owners and managers in the West, via the medium of their annual reports, will outline their actions and

plans to counter these influences; and economic intelligence must take such counteraction into account.

It is not to be excluded, moreover, that the reports of corporate bodies even in the area of controlled economies, especially on its fringes, may in time become available and provide deeper insight or more useful detail of economic intelligence directly on the Communist bloc.

An indexed file of corporate reports should be supplemented by a compilation of the proceedings of international organizations in the industrial and scientific fields. Such organizations, uniting private or national groups in pursuit of objectives varying from standardization of railroad equipment to preemptive regional marketing agreements, hold meetings where the powerful representatives of industrial and scientific elements discuss issues and sometimes reach conclusions. Their agreements are items of economic intelligence, their disagreements sometimes even more valuable ones.

At the present time there is no centralized library of international organization reports. It is one of the needs of the intelligence community. These bodies, in the nature of supergovernments, are of such importance as to justify regular collection of all proceedings. The influence and number of these organizations will continue to grow as the world becomes smaller through economic interplay and improvements in all forms of communications and travel. The advent of newly industrialized countries and areas will increase the scope and power of world associations, and determinations made by newly formed international organizations will profoundly affect developments in all fields of industry and science.

An intelligence officer surveys his new opportunities and problems in a coexisting world.

COEXISTENCE AND COVERT COLLECTION

George Romano

The collection of intelligence information is greatly influenced in its purposes and methods by the state of international affairs; changes in the world situation can create or improve certain opportunities for collection and diminish or even deny others, while shifts in world opinion may seriously affect the advisability of undertaking particular types of intelligence activities. The present time is one of rapid change in world affairs; in general it provides expanding opportunities for collection operations abroad, but at the same time it renders the exposure of these operations by the opposition more damaging than before to our national interest.

In the five years since the death of Stalin the strategy and tactics of the USSR in international relations have changed radically; the old rigidity has made way for a more supple, varied, and resourceful approach; threats are interlarded with promises, and even the customary propaganda blasts at the United States are now mixed with occasional praise. The Soviets themselves have invented the name "competitive coexistence" for their new approach. They have come a long way since they and their Satellites sulked behind the Iron Curtain; the deep distrust which they formerly exhibited and which they in turn inspired has considerably lessened, and their protean behavior makes the contest for world opinion generally more difficult for the West.

In this world of competitive coexistence our diplomats, our propaganda specialists, and our intelligence officers must suit their methods to the changing opportunities and obstacles of the moment. One of the present opportunities for intelligence collection lies in the increase of contact between Soviet and American citizens. Restrictions on travel to and within the United States have always been few, whereas such restrictions have been numerous in the Communist states, so that the present changes gradually reduce our relative disadvantage. But

an obstacle is also hidden in the fact that East and West, and particularly the Soviet Union and the United States, have adopted a less antagonistic posture on the world stage: we are compelled to exercise greater restraint in the conduct of activities which could be publicized by the Soviets as instances of unprovoked hostility. One would expect the Soviets, incidentally, to feel constrained in the same way, but apparently they do not; their intelligence activities have become more blatant and offensive at the very time they profess a desire to improve the political atmosphere.

The Opportunities of Coexistence

The most obvious opportunity for collection is of course that afforded by the increase in travel to and within the USSR. The flow of travel has risen steadily since the exchange of agricultural delegations made the first notable breach in the Iron Curtain in 1955. The most recent development in this field is the agreement signed by the United States and the USSR on 27 January 1958, which provides for "a large number of technical, scientific, and cultural exchanges, including an exchange of radio and television broadcasts." This agreement may be a prelude to further understandings; President Eisenhower's reply in February to a Bulganin letter proposed that other Soviet citizens come to the United States, not in search of technical knowledge but to meet the American people and see for themselves that we want peace. Soviet Ambassador Mikhail Menshikov has expressed a desire to visit California, and this may be an indication of the Soviet Union's willingness to negotiate with the United States the easing of travel restrictions imposed on each other's representatives. Furthermore, it is probable that the Satellite countries of Europe will follow the example of the USSR in developing exchanges with the United States. The expansion of private travel and contact is a trend that governments find easy to encourage but difficult to reverse, and every new increase lends impetus to further popular demands for expansion.

As the volume of travel has increased in recent years, travelers into the Soviet Orbit have brought back more and more information. An intelligent traveler can collect valuable information without once discarding his ostensible role as a traveler if he has had competent briefing on specific requirements and

on local conditions and is subjected to detailed debriefing on the information acquired and on the various circumstances in which it was obtained. The value of the take is cumulative, as new information complements, corrects, or confirms the earlier. Sometimes it supplies the last missing piece of a puzzle: one well-briefed traveler gave such an accurate description of the power-line characteristics of a certain area that analysts were able to determine the type and capacity of a strategic installation. Another alert and well-prepared traveler, making the most of an unexpected opportunity, obtained without incident the best photograph available on a priority military target while his plane was in flight between two principal cities of the Soviet Union.

One very productive traveler is the tourist, the curious, talkative, uninhibited American tourist, with camera attached, who has become familiar in most parts of the world. His nerve and persistence are often rewarded: one tourist overcame a guard's initial objections at an airfield and was allowed to photograph a new plane from every angle; in fact, he even obtained the dimensions of the airfield. Suspicion and resistance vary in different regions and with individuals; they are generally much reduced in the outlying areas. The traveler who is a specialist in subjects of priority interest can be particularly valuable, but his effectiveness is greatly reduced when he travels in a group, as often happens, and is given a guided tour organized by the host government; furthermore, many of these specialists fail to notice what lies outside their professional interests. The persons who will go to the USSR by virtue of the new cultural agreement will be such specialists, and they will probably be chaperoned much of the time; however, any increase in travel to and within the USSR is useful because it aids those travelers who are active in collection by making them less conspicuous.

The trend towards increased contacts between Soviet and American representatives in non-Communist countries is also continuing, and there are indications that the cultural agreement between the United States and the USSR will be the occasion for an intensification of the Soviet campaign, under way for many years, for the development of such contacts; a Soviet press secretary shortly thereafter made a specific reference to the January agreement when he approached his American counterpart with a proposal for social contact. Here again we

expect to gain by reciprocating, and the position of the United States Government in favor of such contacts has been laid down in Department of State instructions in December 1954, March 1955, and January 1956. There are certain countries, of course, where contacts between Soviet and US representatives would, because of local conditions, be detrimental to our national interest, and the US ambassador can restrict or forbid such contacts.

So far we have derived a considerable amount of information from social contacts with Soviet officials, although we must concede that the Soviets themselves have received corresponding benefits. The best of the information is that which has helped us identify Soviet intelligence personnel, monitor their activities and determine their targets and methods. We have obtained a lesser amount of political and economic information; the political information has been particularly valuable when it has helped explain sudden changes in the leadership of the USSR. Social contacts also prepare avenues of defection for Soviet Orbit nationals who may some day choose to remain in the West.

The Soviets must of course be aware of the opportunities afforded our intelligence effort every time they lift the Iron Curtain a little higher and must have chosen to accept this risk in the course of a strategy of peaceful gestures designed to win over the neutrals and neutralize our allies. We can expect more vigorous wooing of both neutrals and allies in the future, and another opportunity for intelligence collection is presented in the Soviet cultivation of these people in their own countries and invitations to view recent achievements in the USSR. The intelligence services and other government agencies of friendly countries can be of great use in helping us monitor Soviet overtures and in giving us an opportunity to guide the responses. Individual nationals of neutral countries can be particularly useful when they cooperate with us, because the Soviets can be expected to speak more frankly with them and allow them more freedom of movement within the USSR.

These are, in brief, the principal advantages we derive from coexistence — more freedom of movement for Americans and their friends to look around the USSR, and a better opportunity to elicit information from Soviets abroad, both directly and through local sources.

The Hazards of Coexistence

The Soviets hope that their new policy of easing tension will release among the neutrals and our allies those forces which, for different reasons and in varying degrees, press for closer relations with the Communist countries. It will therefore be more important than ever that we be informed of any changes in the attitudes of friendly and neutral governments as they occur; our liaison contacts can be very valuable in this respect. We will have to develop greater effectiveness in countering Soviet efforts at persuasion, subversion, and penetration in other countries, because these efforts will be exercised in a more relaxed and therefore more favorable atmosphere in the future.

While coexistence has opened new avenues into the USSR, it has also created a political atmosphere that will force us to exercise greater restraint in the conduct of certain types of operations, and in some cases to abstain altogether. At the height of the cold war, which was also the time of the hot war in Korea, we could use normally objectionable methods like the violation of a target country's air space without worrying too much about hurting its feelings. We became more careful at the first thawing of the Soviet attitude, and we will probably have to exercise even more caution and restraint in the future.

The agreement of 27 January is an expression of good intentions on both sides. The Soviets will probably not be inhibited in their future behavior: at the very time when Bulganin was trying to persuade the nations of Western Europe of the purity of Soviet motives, three Soviet service attaches were expelled from Holland for espionage. We value our reputation more highly, and it will be important to us not to appear, in the eyes of a watching world, to violate our professed good faith. More than ever, we will have to examine all that we do in terms of the damage it may cause our reputation among the various nations of the world in the present international atmosphere.

The political climate of coexistence has had a restricting effect on illegal cross-border operations. This type of operation has always been difficult; the internal controls in the Communist police states make the maintenance of an illegal agent for any length of time extremely precarious, and there are no indications that these controls will be relaxed. Now, in addi-

tion, there are stronger political objections to certain methods of agent infiltration, and we may have to forego some operations because the repercussions in the event of exposure would be more serious than formerly. In illegal operations conducted jointly with friendly services, the problem is compounded by the fact that the friendly government may have political reasons of its own for vetoing the proposed operation. Nevertheless, illegal operations will be undertaken when the information desired is important enough to justify the risk, when agents suitable for the job are available, when the reliability of the reporting can be checked, and when the same information cannot better be acquired through other means.

These are in general terms the prospects for covert collection in the new age of coexistence. The present conditions may change at any time, in which case our methods would probably have to be revised to suit the new circumstances. It seems, however, that the trend towards more normal relations with the USSR, and therefore towards less hostile techniques of intelligence gathering, will continue for some time to come.

In this and the following article two research psychologists debunk some of the exotic methods of suggestion attributed to the Communists and ballyhooed for commercial use.

CONDITIONED REFLEX, DRUGS AND HYPNOSIS IN COMMUNIST INTERROGATIONS

Leonard Hilden

The dramatic confessions of persons brought to trial by the Communists and the pro-Communist sentiments expressed by some Americans released from Communist prisons have led to much speculation about Communist use of Pavlovian conditioning techniques, drugs, hypnosis, and other exotic means of controlling human behavior. This speculation presupposes that behavioral scientists participate in the formulation and development of Communist control methods.

A specific investigation of this supposition has been undertaken. The findings of this investigation are that scientists have *not* participated. The uniformity of control methods throughout the Communist countries makes it apparent that they have been organized into a more or less formal body of doctrine,[1] and it is known that those who use the methods are trained in the doctrine and try to follow it, but all of the evidence points to the fact that the doctrine was developed and organized by the police officials themselves.

The central staff of the KGB and its predecessors does not have any section devoted to psychological or medical research. No scientists are known to have participated in the planning of any of its procedures. It is said that during World War II Beria maintained a highly secret laboratory section in Moscow, in which physicians and other scientists attempted to develop new methods of covert poisoning and other means for eliminating or disabling target individuals. He and his as-

[1] For a description of these methods see Hinkle and Wolff, "Communist Interrogation and Indoctrination of 'Enemies of the States,'" AMA Archives of Neurology and Psychology, August 1956, Vol. 76, pp. 115–174.

sociates were inspired by the activities of the Gestapo along these lines, and established their laboratory primarily in order to keep up with technological advances in the field. It is reported that the results of this work were disappointing and the whole outfit was abolished shortly after the war. The physicians who took part in the work were not considered top flight and were looked down upon by KGB officers in general.

Soviet and Satellite police officers have an earthy contempt for psychology in general and for psychologists and psychiatrists in particular. Former secret police informants are unanimous in affirming that no training in psychology or psychiatry is given to officers who attend the KGB schools.

Aside from the question of scientific participation in formulating procedures, reports on the actual use of these exotic devices is also negative. There are reports of Communist experimentation with them, but no instance of operational use except for normal medical purposes.

Much of Soviet psychology is concerned with adaptations of the conditioned reflex concepts of Pavlov, one fundamental aspect of which is the belief that men can deliberately be made to develop predesigned types of thought and behavior under appropriately controlled environmental conditions. Soviet laboratories have experimented with a variety of situations for the acquisition of conditioned reflexes, and the conditioning method has proved useful in describing and predicting the learning of simple behavior sequences. But so far as can be ascertained the limited scientific applicability of conditioning to intelligence operations has never been exploited by the Communists.

The KGB has a medical department which is organized along the lines of the medical departments in our armed forces. Its mission is to take care of the illnesses of prisoners and KGB personnel. It does include a few psychiatrists, but no medical officer or psychiatrist is ever used in the interrogation process itself. Their function in relation to prisoners under interrogation is simply that of evaluating the state of their physical and mental health, advising the interrogator when men are too ill for further interrogation, and treating prisoners for the effects of the tortures which have been carried out on them. They sometimes administer stimulants to tired or sleepy prisoners to enable them to continue with prolonged interrogations.

They may give sedatives to excited prisoners. They use antibiotics, vitamins, and any other available adjuncts of medical therapy in the treatment of wounds and illness. But we have no reliable evidence of any direct medical or psychiatric participation in attempts to elicit information from prisoners or to produce confessions.

Since the time of the purge trials there have been recurrent reports that the Communist secret police use drugs as a means of obtaining confessions. All the reports which could be found have been reviewed. In no case has it been possible to obtain any substantial evidence that any drug played an important role in a known interrogation or confession. Our informants, former Communist secret police officials, state that no drug had been issued to the MVD for use in interrogations as late as 1953.

There is good reason to believe that secret police in the Communist countries, especially those of Czechoslovakia and Russia, have *experimented* with the use of all the commonly known psychochemicals and so-called "truth drugs." The drugs of potential importance in interrogations fall into three categories, stimulants, hypnotics, and hallucinogenic agents.

The stimulants, in general, have the effect of increasing wakefulness and alertness at the expense of creating tremulousness, feelings of anxiety and overactivity. Caffein, benzedrine, and dexedrine fall into this category. There are a number of derivatives of benzedrine which have essentially the same action. "Aktedron," a synthetic benzedrine derivative, has been used in Czechoslovakia and Southeast Europe. Coffee and benzedrine derivatives are sometimes administered to tired or sleepy prisoners in order to wake them up enough so that the interrogation can be carried on. They have been used in this manner in Eastern Europe, in Russia, and in China. In and of themselves they have no important effect in producing confessions. Used in combination with a system of psychological and physiological pressures they will in many cases accelerate and exacerbate the profound fatigue, confusion, loss of critical judgment, and breakdown of resistance which is a consequence of the full course of control techniques.

The so-called "hypnotics" do not actually produce hypnosis. They are sleep-producing drugs which have a moderately in-

toxicating effect in small doses. The barbiturates such as nembutal and phenobarbital fall into this category. So-called "truth serums," sodium amytal or sodium pentothal, are rapidly acting barbiturates administered by vein. When these drugs are given in the proper dosage, they have a relaxing and befuddling effect similar to that produced by moderate amounts of alcohol. Under some circumstances, individuals intoxicated by these drugs become loose in their talk. But they have no effect in producing truth, and persons under their influence can resist their action to the same extent that they can resist the action of alcohol. There is no evidence that the Communists have effectively or extensively used amytal interviews as a means of extracting confessions, although it is quite probable that they have experimented with this maneuver. The hypnotic drug which is most frequently mentioned as a Communist tool is scopolamine, a naturally occurring substance long known in medical science. It is one of the ingredients in the "twilight sleep" medication used by obstetricians on women in labor. It, too, has an intoxicating and befuddling effect in small doses, an effect which would be difficult to distinguish from that of the profound fatigue, sleep loss, undernourishment, anxiety and confusion produced by the usual Communist control techniques.

In every instance in which there is direct evidence that Communist police have given hypnotic and sedative drugs to prisoners, they have administered these drugs for the purpose of calming and relaxing excited and fatigued individuals. American physicians would be likely to use these drugs in a similar manner for the same reason.

The hallucinogenic agents have likewise been known for a long time. Marijuana falls into this category. Persons under the influence of these agents have a disturbance of their thought processes which can be profoundly disorganizing to them. During the past few years LSD–25 and mescaline (a derivative of a Mexican plant) have attracted much attention because of their use in experimental psychiatry. It is known that the Russians, like other intelligence services, have investigated both of these substances, but there is no evidence that they have ever used them in attempts at operational interrogation.

It should be emphasized that the covert administration of *any* drug (stimulant, hypnotic, or hallucinogenic agent) can produce an impact on the individual undergoing the stress of prolonged imprisonment and interrogation which goes beyond merely accelerating the fatigue, disturbed judgment, and other effects of the usual prolonged control pressures. The covertly administered drug can make the prisoner feel that the interrogation is affecting him more than it really is. It may make him feel that the interrogator is more powerful or more prescient than he really is, or that the situation has become more intolerable and inexorable than it is in fact.

This impact can be exploited by an interrogator to increase the prisoner's cooperation, providing the interrogator is sufficiently perceptive and appropriately flexible in his approach. To what extent this fact is known to the Communists we cannot say. It is likely, however, that so long as they continue to employ the doctrinaire approach of their present imprisonment-interrogation procedure they will not have sufficient flexibility to exploit this aspect of drug effects.

Another question that recurrently arises is whether prisoners at the time of police confession are in a state of hypnosis. No evidence of the use of hypnotists or of hypnotism in any of the Communist confession procedures has been found. At the time of his Gestapo-like experiments, it is said that Beria experimented with the use of hypnosis also. Our informers state that the experiments were a failure and the attempts did not continue.

Although formal hypnotism is not used, the confession routine as it has been described does create in those exposed to it an increased degree of pliability and suggestibility. It is not clear to what extent the Communists are aware of this and purposefully exploit it.

THE OPERATIONAL POTENTIAL OF SUBLIMINAL PERCEPTION

Richard Gafford

Perception is demonstrated to have occurred below the threshold of conscious sensory experience when a person responds to a stimulus too weak in intensity or too short in duration for him to be aware of it. Individual behavior without awareness of the stimulus, of which subliminal perception is a subtype, has been a subject of study in psychological laboratories for at least 70 years, and a great deal of technical data has been collected on the subject. Recently it has been associated with some theories of depth analysis and popularized for possible commercial exploitation by the advertising world.

In the most sensational of these popularized experiments, an increase in popcorn sales in a New Jersey movie theater is said to have been stimulated by subliminal interruptions of the feature film with an advertisement urging the patrons to buy popcorn. The exposure time used, a small fraction of a second, was too brief for conscious discrimination by an observer absorbed in the film story but presumably long enough to have some stimulating effect. The advertising men who are currently interested in this phenomenon as a sales technique argue that the short-duration stimulus appeals to a positive motive, for example an appetite for popcorn, without arousing the rational, conscious sales-resistance of the individual, based perhaps on the desire to save money or lose weight.

The argument becomes more complicated with respect to a product which there is no specific preexisting positive motive to acquire. The appeal is now said to be directed to a "deep" underlying motive presumed to be always operating, never satiated, say the sex drive. The masked stimulus arouses some aspect of this ubiquitous sex drive, a drive which can hardly be directly satiated in polite society and one of which the conscious recognition is more or less anxiety-producing. The vague discomfort the individual feels as a result of subconscious stimulation must be allayed by some associated gratification, and this gratification — the advertiser hopes — is the socially

acceptable acquisition of the product which he is trying to promote.

It is evident that there are several mighty leaps in logic in the advertising man's argument, and a great many places where his scheme can go astray. He has taken several psychological phenomena which have been demonstrated to a limited degree in controlled laboratory experiments and strung them together into an appealing argument for a "technique." Because part of what he is promoting is supported by laboratory data, however, it has enough status to warrant serious attention.

The operational potential of other techniques for stimulating a person to take a specific controlled action without his being aware of the stimulus, or the source of stimulation, has in the past caught the attention of imaginative intelligence officers. Interest in the operational potential of subliminal perception has precedent in serious consideration of the techniques of hypnosis, extrasensory perception, and various forms of conditioning. By each of these techniques, it has been demonstrated, certain individuals can at certain times and under certain circumstances be influenced to act abnormally without awareness of the influence or at least without antagonism.

After careful research on each of these methods, however, it has become apparent that although they occasionally produce dramatic results, their lack of reliability and their requirement for extremely precise controls to obtain the desired effect have limited their operational utility to a very few very specialized instances — situations where just the right persons can be put together at just the right moment under closely controlled circumstances. The primary danger observed in connection with this unreliability is that of a "flashback," of inadvertently producing just the opposite effect to that desired. Subliminal perception as a practical control or persuasion technique is prone to the same difficulties.

There are four principal categories of behavior without awareness.

The individual may be unaware of:

a) his behavior itself.

He may be whispering without realizing he is whispering, or he may be moving into a trap without knowing that

the trap is there. A special case here is abnormal behavior in which the individual fails to realize what he is doing because his normal awareness and self-control have been interrupted by disturbing agents such as fear, anxiety, illness, drugs, or hypnotic suggestion.

b) the relation of his behavior to some stimulus.

The individual may be unaware of the fact that his interrogator is influencing him by saying "Right" after certain statements and by remaining noncommittal after others. The process called "operant conditioning" falls into this category.

c) the stimulus itself, because of its slight impact.

The individual may be unaware of a very faint sound or a quick flash of light, unaware in the sense that he lacks the usual visual sensations. Subliminal perception falls into this category.

d) the precise nature of the stimulus, as well as its relation to his behavior, because of inattention.

The individual may be aware of vague sensations, but he is not aware either of the source or of the significant content of the stimulation, although his behavior may change in accordance with changes in the stimulus. This category includes a great deal of perceptual activity affecting ordinary social behavior. A person is often unaware of the specific cues and clues to which he is reacting not because the stimulus is insufficient to reach the consciousness but because the effort to be fully aware of all the cues all the time would create too great a cognitive strain.

In persuading a person to do something he normally or rationally would resist doing an intelligence operative can make use of any one of these categories of psychological processes. Usually the purpose is to produce *behavior* of which the individual is unaware. The use of subliminal perception, on the other hand, is a device to keep him unaware of the *source* of his stimulation. The desire here is not to keep him unaware of what he is doing, but rather to keep him unaware of why he is doing it, by masking the external cue or message with subliminal presentation and so stimulating an unrecognized motive.

In order to develop the subliminal perception process for use as a reliable operational technique, it would be necessary a) to

define the composition of a subliminal cue or message which will trigger an appropriate preexisting motive, b) to determine the limits of intensity between which this stimulus is effective but not consciously perceived, c) to determine what preexisting motive will produce the desired abnormal action and under what conditions it is operative, and d) to overcome the defenses aroused by consciousness of the action itself.

As to the composition of the subliminal cue, it cannot be supposed that just any message presented close below the threshold of recognition will be translated into appropriate action. The determination of the right kind of message in terms of content, number and type of words or symbols, grouping of symbols, and so forth has been the object of a great deal of psychological experiment. There is a good deal of lore and a few rather vague principles available, but generally they concern rather trivial areas of action from the viewpoint of the intelligence operative. Since the effectiveness of the procedure depends on not arousing the person's defense mechanisms, and since defense mechanisms are not only peculiar to each individual but hard to discover, it is difficult to specify even what is to be avoided in the composition of the subliminal cue in order not to arouse the defenses.

Thresholds of recognition are variable and difficult to determine. If the intensity of the stimulus is much below an individual's threshold it doesn't get through to even the most automatic areas of his sensorium. But recognition thresholds vary tremendously, not only among individuals, but also in the same individual from one time to another, in accordance with his physical situation, his physiological condition, and above all the degree to which he is psychologically attuned to the particular content of the message. A normal human being is an infinitely more complex receiving instrument than any electronic gadget, and adjusting a stimulus for such a variable receiver is difficult. In most of the laboratory studies on which the current theory of subliminal perception is based [1] there has been a long pretrial period requiring the subject's full cooperation to zero him in on the subliminal signal. Such preparation is clearly not feasible for operational use. The message must

[1] For specifications and data see "Handbook of Experimental Psychology," S. S. Stevens (ed).

therefore be transmitted on a much wider intensity band and may frequently not get through or may on the other hand penetrate to the subject's consciousness and arouse his defenses.

The message once received is presumed to trigger some sensitive subconscious motivation to action. There are numerous psychological theories about such inner functions, but little definitely known about them. If a somewhat homogeneous sample of people is tested a number of times, most of them will be sensitive most of the time to the subliminal cue; but some individuals, for a great variety of reasons we can little more than guess at, will be insensitive. In this minority of instances the individual may do nothing, may do something trivial and irrelevant, or may do the exact opposite of what was intended.

If the subliminal cue is to work by tripping off an existing motive to action, one must know what motives are positive and operant at the moment. The obvious basic drives (e.g. hunger, sex) are sometimes satiated and sometimes subordinated. With a great deal of knowledge about the individual, some predictability can be attained, but it is still a matter of probabilities. The percentage of instances will be high where the opposite motive to that desired will be tripped off.

There appears thus to be such a myriad of factors that even the most simplified empirical tests carried out with the best possible cooperation of the subjects are rarely marked by really significant reliability. Furthermore, with such a large number of variables and relatively low reliability, it is difficult to determine whether the controlled variable or uncontrolled artifacts are producing whatever results one does observe.

Finally, the subliminal device to avoid alerting an individual's defenses by masking the cue and the basic motive does not cover the effect of awareness of the resultant abnormal action itself, with its implications and consequences. Assuming that one could persuade to such action by presenting a cue subliminally, there is no way of effecting the action without awareness and without tripping off defenses and rational resistance. It must be concluded that there are so many elusive variables and so many sources of irregularity in the device of directing subliminal messages to a target individual that its operational feasibility is exceedingly limited.

This article, the first of a series describing the exploitation of Soviet scientific and technical publications by the intelligence community, corrects public misapprehensions about what happens to these publications in the Library of Congress.

THE DUST THAT ISN'T THERE

George A. Pughe

A rash of articles has recently appeared, both in the daily press and in such a distinguished source as the *Federal Bar Journal*,[1] expressing deep concern over our failure to exploit Soviet and Satellite publications, especially the Soviet scientific and technical literature. With extraordinary uniformity these articles point out that although the Library of Congress "receives between 20 and 30 thousand Soviet publications annually, they are simply gathering dust on the shelves of the Library." The same articles note by way of contrast that the USSR's *All-Union Institute for Scientific Documentation* (VNICI), located in Moscow, has a permanent staff of 2,300 employees who screen and abstract or translate over 11,000 periodicals (largely U.S. and U.K. publications, but including also those produced in the USSR itself) in 85 different languages and publish 15 comprehensive abstract journals in the physical, natural, biological, and earth sciences.

While it is true that the Soviet program is more comprehensive than the combined U.S. effort, this disparity must be read in the light of Western generosity, which gives the Soviets more materials to process. It is fortunately *untrue* that the resources of the Library of Congress are "gathering dust on the shelves."

As early as 1948, the Directorate of Intelligence, United States Air Forces, recognized the vast intelligence potential available

[1] "The Dissemination of Technical, Scientific, and Engineering Information as a Factor in 'Competitive Co-Existence,'" by Jennie and Herschel Clesner. *Federal Bar Journal*, Vol. XVII No. 3, 1957, p. 236.

in the Slavic Collections of the Library of Congress. At that time funds were transferred to the Library, under authority of the Economy Act of 1932, to support a massive attack on the problem of screening, abstracting, translating and otherwise utilizing all of the information of air intelligence value available in the Library. Since then Project Treasure Island, embodied as the Air Information Division (AID), has been exploiting annually between 40,000 and 50,000 publications currently acquired or previously available in the Library, supplemented by the Soviet and Satellite publications collected by Air Force representatives abroad.

During the period from 1948 to 1951 the principal emphasis was placed upon locating and exploiting economic and industrial information essential to the growing mission of the Strategic Air Command, that is, air target intelligence. Since the Library of Congress was faced at this time with a backlog of some 70,000 uncatalogued Russian publications, the Air Force provided additional funds to obtain the necessary controls over this large body of material, an action which has been of great benefit to the Library, other Federal agencies, and the nationwide scholarly community.

In 1951 Treasure Island broadened its program, by Air Force directive, to exploit information bearing directly upon the Soviet and Satellite military and civil air potential, with particular emphasis upon Soviet Air Force doctrine, strategy, tactics, logistics, equipment, organization, training, and personnel.

In 1953 the Air Force directed that a program extending to Soviet science and technology be initiated and that additional qualified specialists be engaged to undertake the systematic exploitation of the Soviet publications then becoming available in the physical and earth sciences, as well as the related technologies.

At this point it became apparent that much greater emphasis should be placed upon mobilizing and improving all ways and means at hand for acquiring the most recent Soviet journals, monographs, dissertations, and other published sources. As a first step, the Air Force arranged that all Soviet and Satellite publications collected abroad by air attache offices and other personnel should be forwarded directly to AID. For its part, the Library of Congress initiated or expanded a series of actions and programs designed to increase the flow of Soviet

Bloc materials. Blanket orders for virtually all available Soviet books were given to book dealers overseas. Exchange agreements were negotiated with libraries and scholarly institutions in the USSR. At the present time, the Library has exchange agreements with no fewer than 124 Soviet libraries and institutes, the principal agreement being with the All-Union Lenin Library in Moscow. The terms of this agreement call for the annual exchange of 2,500 books and 70,000 frames of microfilm. The Air Information Division has been authorized to nominate about 80% of the specific items to be requested by the Library of Congress under this agreement.

The Air Force has similarly stepped up its collection program by establishing a central document collection office at its European headquarters in Western Germany, by emphasizing the importance of this program in its orientation of newly assigned air attaches, and by developing such devices as "want lists," specific requests for information, and other means for guiding overseas collectors.

These actions have increased the flow of Soviet and Satellite publications by 400% during the last three years, and a recent development promises to yield additional items sometimes missed or simply unavailable through established collection channels. An agreement reached between AID and several libraries abroad which are able to obtain hard-to-get but important items such as doctoral dissertations provides that such items will be microfilmed by these libraries and forwarded to the Library of Congress. Now there is greater assurance that AID will be able to acquire practically all significant Soviet publications through one means or another.

With the collection program effectively under way, the problem for AID is to develop means to exploit all of the material for information of air intelligence value. With the broadened emphasis on Soviet science and technology arises the formidable task of locating and attracting specialists who have not only a fluent command of technical Russian, a reasonable knowledge of English, and an advanced academic background in the physical or earth sciences or related technologies, but also some practical experience in the aircraft-missile industry or in industries which contribute to our air weapons systems.

For the past eight months an active recruiting program has made possible the appointment of additional specialists who

meet these high standards. The qualifications of other appointees approximate these requirements, and many of the older members of the AID staff can also contribute to the exploitation of materials in the field of science and technology.

Nevertheless, it is still desirable and necessary to mobilize talent available outside of AID. The cover-to-cover abstracting of 136 Soviet scientific and technical journals and the critical review and evaluation of all Soviet books available (100 to 150 per month) is beyond the capability of even an expanded AID. As of February 1958, overseas capabilities either in or available to the Air Force have been developed to abstract some 94 Soviet scientific and technical journals. The remaining 42 and all books are processed in AID.

For the foreseeable future, AID will continue to provide special assistance to Air Force contractors who are undertaking special studies and evaluations of different aspects of the Soviet air weapons systems and potential. This requires a specialized pinpointing of desired information, as distinct from a comprehensive exploitation of pre-determined sources. In time, of course, the massive volume of scientific and technical data which will be available through the abstracting and book evaluation program (40,000 abstracts and 1,500 book reviews annually), together with the support of the Air Force Technical Intelligence Center, promises to facilitate the problem of assisting these contractors.

Since the very inception of this exploitation program in the Library, the Air Force has made available to the intelligence community virtually every item of information produced by AID. And while it has no direct responsibility within the Government for making such information available to the public, the Air Force advised the National Science Foundation a year ago (April 1957) that the abstracts and book reviews of Soviet scientific and technical literature were all available for publication and use. Means for making this material available to the U.S. industrial and scientific communities are currently being considered by both the executive and the legislative branch of the Federal Government. Meanwhile, precious little Soviet literature has been gathering dust on the shelves of the Library of Congress.

A professional logician defines intelligence and draws important conclusions both theoretical and practical.

INTELLIGENCE AS A SCIENCE

R. A. Random

Some writers on intelligence problems suggest that intelligence is a science or at least should be made one. This article examines the question and discusses its practical implications.

We shall need two or three definitions. The first is one for intelligence, and some care must go into its phrasing, for it is central to the argument that follows. In polling some of my professional colleagues, I find no general agreement on the meaning of "intelligence"; each of them tends to particularize his definition so that it covers at best but little more than his own occupational specialty. Each will admit that there are others who engage in activities similar, even very similar, to his, but "what they are doing is not intelligence, strictly speaking." And I find a similar lack of agreement, and of precision, in the literature of intelligence. We must therefore construct our own definition.

The definition of a concept, if the aim is truth and accuracy, is not to be undertaken without due regard for logical principles. Any definition must take the form of a two-part equivalence. The first part is the constant to be defined, or the definiendum, and the second, the definiens, is an arbitrary structure containing only constants whose meaning is either initially clear or previously explained. The definiens, to avoid a vicious circle, must exclude the constant being defined and any other expression previously described with the help of this constant.[1] Further, if the definition is to be useful, or perhaps even logically sound, it has to define the concept not in terms of its properties, but in terms of the unique set of operations with which it is synonymous.[2]

[1] See Tarski, Alfred. *Introduction to Logic.* New York, Oxford University Press, rev. ed., 1946, p. 35.

[2] P. W. Bridgeman. "The Logic of Modern Physics" in *Readings in the Philosophy of Science,* Herbert Feigl and May Broderick, ed. New York: Appleton, Century, Crofts, 1953, pp. 36–7.

In constructing a definition for intelligence we must therefore state its *general* and then its *specific* unique set of synonymous operations. These sets derive from the fact that intelligence is, above everything else, a particular kind of human activity. Our definition must be both comprehensive, in that we omit nothing which is a part of intelligence, and exclusive, in that we include nothing which is not a part of intelligence.

The definition here proposed is the following: Intelligence is *the official, secret collection and processing of information on foreign countries to aid in formulating and implementing foreign policy, and the conduct of covert activities abroad to facilitate the implementation of foreign policy.* This definition appears to meet the logical requirements given in the preceding two paragraphs. Its critics will have to demonstrate that the constants in the definiens, the italicized words, are not components, or do not include all the components, of what is, or may be, generally thought of as intelligence. All of these constants refer to activities that are and have been carried out at one time or another under the intelligence banner, and they are sufficiently particularized by their official-secret designation to exclude other categories of human activity.

Another definition we need is for science. A generally accepted definition has it that science is *accumulated knowledge, systematized and formulated with reference to the discovery of general truths or the operation of general laws.*

If we review these two definitions together, it is apparent that there is nothing in intelligence which precludes its being a science. The unity of science is a matter of methodology, not of subject matter, and intelligence has accumulated knowledge, empirical data, susceptible of systematization and formulation. It therefore *can* be a science. But an examination of the present state of this accumulation with reference to the discovery of general truths and the operation of general laws leads to the conclusion that intelligence probably has not yet reached that status.

If intelligence could be a science, what kind of a science could it be? What developed sciences deal with data similar to the data of intelligence? Is it possible that some developed science, a science that has gone a long way toward finding its general truths and the operations of its general laws, may not have covered all or a very large part of the ground covered by intelligence? Answers to the first two questions will throw light on the methodological problems of organizing the data of intelligence and the formulation of its general truths and laws. An affirmative answer to the third question would suggest that it might be redundant to make a separate science of intelligence.

In the taxonomy of science there is one large grouping called the social sciences, or more recently the "policy sciences." The policy sciences deal with *the integration of values realized by and embodied in interpersonal relationships.* Matching this definition against our definition of intelligence, it is quite clear that nothing in intelligence excludes it from the group of policy sciences as one of their specialized aspects. The general, across-the-board policy science principles or general truths and laws are, then, applicable to intelligence.

Now let us look again at intelligence to see which of its aspects set it apart or distinguish it from some other kind of human activity, or "interpersonal relationships." The more one studies this question, the more apparent it is that if we take away the words "official," "secret," and "covert" from our definition, there is nothing done under the heading of intelligence that is not done in an identical or nearly identical way in the non-intelligence world. But these three modifiers are qualifying and adjectival, rather than fundamental. With this breakdown it is very difficult to see intelligence as a system of related phenomena so specific, separate and irreducible that it must be treated as a separate science. As pointed out above, intelligence *can* be treated as a separate science. However, if obviously related systems of phenomena, or developed sciences, can be extended to include intelligence, and if the differentiating aspects of intelligence are more qualifying than basic, the development of a science of intelligence becomes altogether redundant.

To suggest that it is redundant and impractical to erect a science of intelligence is not to reject the application of scientific methodology to intelligence, and specifically the acknowledgement and use of the principles of the social sciences applicable to the phenomena of intelligence. Such a rejection would reject rationality and scientific principle as a basis for practice, and substitute intuitive guesses and unanalyzed conjectures. While irrational conduct of intelligence practice, like non-principled behavior generally, may become skillful and

may be successful to the extent of attaining particular ends desired, as a rule it can be recommended only as a kind of short-cut in simple situations. When the situation is complicated and the actor is confronted with multiple choices of action, reliance on non-principled behavior introduces an unacceptably high level of probable error.

The propositions advanced above — that it is not profitable to develop intelligence as a separate science because the phenomena with which it deals are covered by the social sciences, and that the only sound practice of intelligence is that based on the scientific method as specifically applied in the social sciences — have important practical implications. The main one of these is that we must build up within the intelligence community a knowledge of scientific method and the techniques and principles of the policy sciences and must study their application to intelligence problems. We must do this because it is the only way to effect any fundamental improvement in professional intelligence practice.

For the intelligence officer to concern himself with scientific method and its application in the policy sciences and with the application of the principles and techniques of the policy sciences to his work may seem to introduce complexity and irrelevancies into an already complicated business. It may seem "theoretical" in the invidious sense of the word, that is impractical. Yet if he does not do this, he opts for non-principled, irrational activity patterns, and he has no place else to go to find the principles basic to his professional activity.

Since World War II a great deal of progress has been made in finding practical application for improved social science methodology and techniques, progress comparable in quality, if not in breadth and depth of application, to contemporary technical advances in physical science. While most of this progress in practical application has been in the military field (in *use* of weapons systems as distinguished from weaponry itself, a sub-discipline of physical science and technology), and in economics (applications in business and industry), there has been some attempt at application of the other policy sciences. However, there is a considerable technological lag in adapting new methods to some fields of endeavor that derive their principles from the policy sciences. When one examines some of the work that has been done in such organizations as

the Rand Corporation and notes its application to, say, business and industry, one is forced to conclude that kinds of activity similar to intelligence make fruitful use of techniques of which we in the intelligence profession are only dimly aware.

To list in detail new social science techniques which could be of practical use to intelligence would require a thoroughly annotated bibliography of a length beyond the scope of this paper. It may be said here that the progress in this field stems mainly from developments in logic, where it takes such forms as symbolic logic and heuristic science. These developments are basic to the current progress in both the physical and policy sciences. Those interested in this newer logic can consult Hans Reichenbach's *The Rise of Scientific Philosophy*, reprinted in 1957 in a paperback edition by the University of California Press. As an example of technique derived from the development in logic, one might cite Operations Research, defined as a scientific method of providing executive departments with a quantitative basis for decisions on operations under their control. This technique is described by J. F. McCloskey and Florence N. Trefethen in their *Operations Research for Management*, published in 1954 by the Johns Hopkins Press. Karl W. Deutsch's *Nationalism and Social Communication*, Wiley & M. I. T., 1953, is a fine example of how the newer techniques can be applied to the analysis of specific political problems.

Introducing these new methods and techniques into the intelligence profession will be difficult. Many of them have not yet been processed to a point where they can have direct practical application. As presently stated, they are often unintelligible to any but social sciences experts with a strong methodological or symbolic-logic bent. Other methods, more developed toward the practical, have been evolved for concrete problems which pertain to the intelligence profession only by extension. What is needed in either case, in effect, is to bring together those who are concerned with the formulation of principles and underlying methods and those — the intelligence technicians — who are concerned with practice, so that the latter can communicate their needs. Once the need is perceived, there is no reason why this kind of consultation cannot be arranged. Through such communication we should derive the insights that we require to improve our professional practice.

Articles and book reviews on the following pages are printed without classification and without identification of the writers, for the convenience of readers who may wish to detach them from the classified body of the *Studies*.

NOTES ON QUALIFICATIONS FOR GOVERNMENT RESEARCH AS OPPOSED TO ACADEMIC STUDY

Government organizations for research in foreign political, cultural, social and economic fields depend heavily on research training programs in the academic world as sources of bright new recruits. The meaning of research as a function is clear to both sides, but research in government agencies has in some details of practice moved away from the pattern of action familiar to academic research groups. With this thought in mind, I venture to set down a few pointers to the special qualifications which we in Washington are finding desirable in candidates for jobs with us.

Let me dispose of one point at once. We want young recruits who are well trained in research, who know their subjects, and who know how to evaluate fresh information and apply it to the growing pattern of knowledge which they possess. We want them, furthermore, familiar with as many approaches and disciplines as possible. Above all, we want recruits who are used to looking beyond the "What happened?" to the question "Why did it happen?" We fortunately know that on all these matters the academic programs, especially area programs, are in agreement with us and have precisely these objectives in their training. These are, however, not all the qualities for which we look.

Let me sum up our needs by saying that our recruits must be capable of presentations that are clear, brief, bold and prompt; that their jobs will require them to be cooperative, patient and often anonymous. Behind these simple words lurk serious considerations.

Government researchers work, of course, for operating officials who make decisions on action. It would be useless to pretend that these officials are themselves all stylists; in some, however, the nature and urgency of their work have produced a direct, concise form of writing; in all, whether or not they write gobbledygook of their own, is a firm determination not to master the gobbledygook of another tradition. Unfortunately, we have seen no evidence that education, and especially higher education, has modified its indifference to style and form. It appears that too great emphasis is still put on assim-

ilation of learning, too little on exercises of active presentation. Facts may speak for themselves, but all too easily they may speak tc an empty hall—and the effectiveness of a report in helping officials varies directly with its clarity.

In the modern world, government officials are inordinately busy; they simply cannot contemplate large accumulations of detail. This imposes a singular responsibility upon the supporting researcher. He must not only accumulate information but also condense it—and this not by compressing his accumulation, by reducing a picture to a miniature, but by selection and distillation. In short, he must often act not as an amanuensis but as an authority, whose statement of conclusions will be guaranteed, not by a mass of footnoted detail, but by his reputation for well founded judgments. The responsibility is flattering but awful. One of the great services any training program can do is to insist upon practice in the art of briefly distilling out ideas and conclusions from massive compendia—and, indeed, there is no better device for revealing any flaws or hollowness in externally impressive monuments.

The third quality flows from these two. Any writer will realize that to expose his essential ideas baldly in brief compass requires confidence. Yet the researcher is always contributing towards decisions, and decisions require the stripping down of qualifying factors to essential issues. Decisions further require departing from the footnoted past into a future which cannot be documented but which must be analyzed under the head of possible consequences. We benefit by any curriculum which includes exercise in general ideas beyond the scope of footnotes, and speculation beyond the confine of the documented present.

Lastly, these clear, brief, and forceful presentations have to be accomplished under pressure. Even worse than writing a paper that no one will read is to write one that reaches an officer after he has made his decision—yet the succession of crises is nowadays so close that deadlines come upon the very heels of requests. Promptitude is, we know, part of every course of training. Another aspect of the problem is, however, perhaps less open to action by a training program. Decisions can often not be postponed, and although little knowledge may be dangerous, surely none is worse yet. The researcher may, despite all proper planning and foresight, be called upon for

judgment founded on information that is insufficient but the best *available*, and again he may need boldness if he is to be prompt in fulfilling his advisory responsibility.

Besides these peculiar arts of presentation, certain more general qualities will make the recruit happier and more effective. He is likely to find himself in an organization where few research jobs are performed by a single individual. It is not for us to tell up-to-date academic research authorities that modern problems require a fusion both of disciplines and of regional views; the authorities may not, however, realize the extent to which our agencies are organized to effect fusions of this sort under pressure. Through often feverish processes of consultation, submission of fragmentary drafts, and joint composition, our analysts are collaborators to a degree seldom required in private research, and must possess well developed abilities to cooperate.

By the same token, our analysts in their written production remain largely anonymous. It is impossible to sort out credit for the joint compositions that issue from our shops, though through consultations with other officials and through committee work any analyst can very soon gain sound personal recognition. Even in this respect, however, he must sometimes remain behind the scenes. Higher officials, in attending their own committees, cannot trail clouds of witnesses along with them. The analyst must often be content with briefing some superior to present his ideas, and obtain his satisfaction from any effect, even though indirect, that his thought has had upon policy. Some experts have found this procedure strange, and recruits may well be prepared for it in advance.

Finally, we in our research agencies must be patient. It is generally known that frustration is a besetting evil of government work. The machine is very large, very complicated, very ponderous, and often very slow. It is strange, however, that annoyance at the delays should be so common amongst academic folk whose private work is so often performed *sub specie aeternitatis*—yet we find researchers who get miffed because their first written words are not at once whisked into a public proclamation. The wheels are large; it takes a great spate of words to move one of them a tiny inch; but every inch it moves makes history. This is the reward our business offers to patience.

CRITIQUES OF SOME RECENT BOOKS ON INTELLIGENCE

AIR SPY. By *Constance Babington-Smith.* (New York: Harper and Brothers. 1957. Pp. 259. $4.00. Also under title EVIDENCE IN CAMERA. London: Chatto and Windus. 1958. Pp. 256. 21/–.)

This story of photo intelligence in World War II is a story of pioneering—not only the pioneering of unarmed pilots in operational high altitude flying, of those who developed the camera models and techniques for this phase of photography, but also the pioneering of imaginative and patient specialists in innumerable fields of activity, dedicated to the translation of photographs into a meaningful language as a basis for important decisions and actions.

The book gives well deserved recognition in print to the heroic efforts of individuals devoted to the service of their countries in the particular field of photographic intelligence. It makes clear to the reader that this was a front-line job of greatest importance, requiring singular courage and perseverance but bringing satisfaction in its accomplishment. Of special satisfaction to the individual was the fact that his task involved the use, not of destructive weapons, but of tools that produced constructive results of greatest effectiveness.

Here are stories of pilots whose only thought was the completion of the task at any cost to themselves. They not only had to take pictures under all kinds of weather and military conditions, but had to get them back where they could be used. The pilots who showed this determination and endurance had learned the importance of the information that could be obtained from air photographs.

But there were not only the pilots. Miss Babington-Smith explains that the use of women as experts in this field was due to Sidney Cotton's conviction that "looking through magnifying glasses at minute objects in a photograph required the patience of Job and the skill of a good darner of socks." She brings into focus the necessity for the many complex aspects of photographic interpretation and intelligence activities, and in particular the need for specialized background knowledge in studying a photograph to obtain specific information.

The vertical photograph in photo intelligence usage has been found to be a precise mathematical document: measurements of depth, height, width, speed, etc., can all be made, but a working knowledge of fundamental mathematics is one of the background essentials of the trained interpreter. It is also essential that the interpreter know what is to be expected as normal in the appearance of a photo in order to distinguish what is abnormal and then to recognize its significance. A specialist in geology or oil is needed to appreciate the information obtained from photographs of oil production installations. Only a specialist in aircraft industry can translate the language of aircraft factory photographs into data on their activities and production. A cartographer must utilize the information about the layout of the land contained in photographs of specific areas. The techniques of the archaeologist, trained in piecing together positive and negative evidence, are useful in determining the enemy's possible motives. With the detailed figures learned from photographs, sculptors and artists can produce three-dimensional models giving substance to the photographic information. In all these procedures results are obtained by the patient approach and deductive reasoning of the scientist.

The interpreter is responsible for the information he reports, which is then coordinated by intelligence personnel with other reports and sent on to those whose responsibility it is to make decisions as to action. The author conveys to her readers the PI's spine-tingling realization of the importance of an accurate and responsible translation of lines, figures, and shapes into facts and ideas. She high-lights the urgency of the struggle to integrate the many activities involved in photo intelligence and the eagerness with which the various branches of service received its benefits.

The development of effective techniques and the initiative and creative faculties of the British, and later the allied personnel, who used them give this story real drama and challenge. The author emphasizes how much more effective the Germans could have been if the excellence of their photographs had been equalled by the intelligence and imagination of those assigned to interpret them. She also brings home the realization that by now, some years after this early pioneering development of techniques and procedures, there must have been

great strides by others in this sphere of intelligence, with the result that our own activities are doubtless scrutinized and examined in detail by other countries.

In Chapter VII, "Bombing Offensive," the author goes into some detail in describing the role of photographic intelligence in planning operations on the basis of photographic information as to targets, in damage assessment, in learning the secrets of counter-measures, in spotting and tracking down inventions such as the German radar, in industrial analysis and assessment, and in discovering threats of new weapons such as the V–1 and V–2. Perhaps she gives the best insight into photographic interpretation in Chapter IX, "The Battle Against the V-Weapons." For the many who share the current interest in guided missiles, this Chapter is most instructive.

It is paradoxical to note that the photo interpreter of today finds himself in one respect in the same predicament as his forerunner of 1943. When British intelligence was on the alert for "secret weapons" in early 1943, "no one really quite knew what they were looking for, although the Air Ministry did suggest that the interpreters should be on the lookout for three things: a long-range gun, a remotely-controlled rocket aircraft, and 'some sort of tube located in a disused mine out of which a rocket could be squirted.'" How familiar this sounds to the present-day PI, not only with reference to guided missiles, but in other high priority fields such as nuclear energy, rocket aircraft and electronics! In most cases the PI has extreme difficulty obtaining permission to get a first-hand glimpse of actual guided missile, atomic energy, and other critical installations. He finds himself in the position of being asked to find a needle in a haystack without being permitted to see first what a needle looks like.

The book's final chapter describes the valuable contribution made by photo intelligence to the planning of the D-Day landings—the study of the beaches and how they were affected by the cycle of natural influences, the coastal defense interpretations, and the three-dimensional models for use in briefings, giving a vivid view of the accesses and obstacles to those who were to face them.

All through the book there runs the thread of the necessity for careful coordination and integration of photographic intelligence activities, and the plea for continuing progress in this

field to assure concise and unique intelligence whenever it is needed. Repeatedly the author stresses the usefulness of going back again and again to reassess old photographs in a new light with the discovery of aspects not recognized before. Each new find is likely to throw fresh light on the earlier photographs.

Air Spy places in on-the-spot perspective some of the most dramatic events of the war in Europe and brings to light some of the features of planning and decision to which no ordinary civilian can have access. To those already familiar with the names and photographs and efforts of its characters it has a special significance and interest. It is unfortunate that Miss Babington-Smith, not having participated in the photo intelligence activities in the Pacific, was unable to give similar recognition to those whose work there was of outstanding merit and significance.

THE WAR POTENTIAL OF NATIONS. By *Klaus Knorr*. (Princeton: Princeton University Press. 1956. Pp. 310. $5.00.)

This book was written by a distinguished political scientist as a contribution to the theory of war potential, the measurement of which he considers to be an important task even in a nuclear age. The military strength of a nation is composed of two prime elements: forces in being, both men and material, and the potential capacity to provide additional quantities of military manpower and equipment in a mobilization build-up or in wartime. Professor Knorr is concerned entirely with this potential capacity, a subject of basic importance in intelligence estimation.

Potential military power, the author states, is a combination of three determinants: the will to fight (morale), administrative ability (primarily governmental planning and programming competence in wartime), and economic capacity. This book represents the first general attempt to show how these determinants interact. As such, it is an interesting, informative, and useful contribution. It is a product of extensive and thorough research in a number of disciplines—political science, sociology, psychology, history, and economics. Professor Knorr's main argument—namely, that there is a great deal

more to the measurement of war potential than economic factors—is beyond dispute.

At the same time, the reviewer is struck by the difficulties of integrating the numerous variables pertinent to the analysis. The economic variables are treated thoroughly. The familiar categories of gross national product, structure of the population, and foreign trade are set out clearly and in detail. Furthermore, the critical point of flexibility in the economy and its relation to maximum war potential is put in needed perspective. However, after the ordering of the factors affecting the will to fight and administrative capacity, the reviewer is baffled as to how these factors can be measured and integrated with each other and with the more traditional economic elements. Professor Knorr does not propose the felicific calculus which would do the job. He limits himself primarily to identification and appraisal. He believes, however, that the techniques of integrated analysis can be developed over a period of time. And perhaps he is correct.

The real question is, how useful would such an effort be, granting the possibility of success, in an age of intercontinental ballistic missiles with hydrogen warheads? The author attempts to take this question into account. He recognizes that potential capacity may be of no particular significance in an all-out nuclear exchange. He also admits that in the "brushfire" type of war, where neither contestant mobilizes more than a fraction of his potential capability, a precise measurement of this potential is not needed. He argues, however, that between these two extremes there is a range of other types of conceivable, and indeed likely, conflicts where the traditional measurement of war potential would be important.

Why does he consider non-nuclear wars of attrition, similar to World War I and World War II, to be a "major contingency?" His answer—because of the possibility that the two antagonists, capable of inflicting near total nuclear destruction on each other, may refrain from using it, except as an act of "utter despair." This is, of course, the familiar concept of the atomic stalemate, and this is the concept which must be examined.

To this reviewer, a true atomic stalemate can exist only under a very special set of circumstances which probably can persist for only a short period of time and which may not in fact ever exist. There are two essential elements for such a

stalemate: (1) the possession by both antagonists of a massive nuclear delivery capability and (2) the inability of either antagonist to cripple seriously the delivery capability of the other. In sum, the stalemate exists only so long as neither side can be sure that massive nuclear attack will not bring heavy retaliation in kind. Much of what has been popularly written about the so-called atomic stalemate has been confused with the unwillingness of the United States to engage in an offensive (or preventive) war against the Soviet Union. But this unwillingness has nothing to do with military capability, particularly when one considers the military value of the first attack under conditions of surprise.

The development of "clean" nuclear weapons or other technological improvements may make more likely their massive use without wholesale involvement of non-target populations, that is without threat to world civilization. In this event, if the Soviet Union were able to neutralize the delivery capability of the United States by using conventional jet aircraft or missiles, a true stalemate would not exist. For if our remaining weaponry were sufficient only to inflict a few million casualties against an alerted Soviet air defense, peace would hang by a slender thread indeed. In the 1930's the Kremlin leadership was willing to pay the price of a few million casualties to collectivize agriculture. When the stakes are world domination, this cost could seem very cheap.

This point, then, is the thrust of my disagreement with Professor Knorr—the belief that a nuclear stalemate or near stalemate has been brought about or that if it is brought about, it is likely to continue for any appreciable historical period of time. For a stalemate would not be a point of stable equilibrium. The one certain fact about military technology is that it changes, and in the postwar period it has changed very rapidly indeed. If this judgment is correct, then the use of nuclear weapons is not a remote possibility, but a distinct probability, in the event of major war.

THE RISE OF KHRUSHCHEV. By *Myron Rush.* (Washington, D. C.: Public Affairs Press. 1958. Pp. 116. $3.25.)

Research on Soviet politics is somewhat like radar. Because of the secrecy enveloping the target, specialists in the West

must use a variety of sensitive instruments to record the little blips, or reflections, of Soviet political reality. These numerous blips form a discernible pattern lending itself to interpretation. Focusing his own specialized instruments on the post-Stalin political scene, Myron Rush of the Rand Corporation has attempted to reconstruct an accurate image of the processes by which Soviet party chief Nikita Khrushchev acquired much of the power once held by Stalin. The result of his investigations, *The Rise of Khrushchev,* is a well documented and provocative case study of Soviet politics; but it is its methodology, rather than its conclusions, which is likely to provoke debate among intelligence analysts.

The Rise of Khrushchev is clearly the product of a prodigious amount of work. It brings together an impressive number of facts, and the author frequently shows considerable resourcefulness in relating them. Its distinguishing feature, however, is the author's application of the techniques and conceptual tools of "content analysis" to the obscure world of Soviet politics. It is the author's contention that relationships within the top Soviet leadership are deliberately concealed behind a facade of monolithic unity, but that the existence of differences, and something of their nature, can be deduced from: (1) painstaking study and comparative analysis of public statements and printed texts which, in the author's view, contain "esoteric communications" from the "elite" to the "sub-elite"; (2) observation of the way in which the public symbols of prestige are manipulated; and (3) examination of the use of political patronage. It is on the first two devices that the study is mainly based and on which its results have to be judged.

The author shows rather convincingly that there is a great deal to be garnered from a close reading of the public statements of Soviet leaders and other authoritative sources. These are only infrequently to be taken at face value, but at the same time they are not always empty cant or formula-mongering. They sometimes contain clues to the thinking of the leadership expressed in a kind of algebraic language, and the revision of formulas can often be related to considerations of policy and political maneuvering. Proceeding on this basis, the author examines a vast amount of material covering a broad range of subject matter and arrives at a number of plausible conclusions: the rise of Khrushchev was reflected rather clearly in

published statements and articles and in the manipulation of the symbols of prestige; there have been differences in the top leadership over the issues of power and policy; and there was contention within the leadership over the scope and pace of de-Stalinization. These are some of the merits of the study.

But it also has weaknesses, most of which can be traced to the author's failure to recognize the limitations of his technique of "content analysis." Instead of using this device as one means to an end, he seems to regard it, in practice, as a key which will open any door, as a comprehensive methodology rather than as an analytical tool. This leads to serious abuses — to the construction of elaborate, even labyrinthine, hypotheses from a long chain of inferences, some of which are plausible, some of which are doubtful, and some of which are downright absurd. Inferences derived from "content analysis" should be regarded as a starting point. They should be placed side by side with inferences developed by other means — by the examination of the many sources of policy, the forces and demands created by the operation of policy, the institutional framework, and the international environment. This the author persistently fails to do.

From his starting point, his assumption that *some* variations of phrase or nuances of public expression lend themselves to reasonable interpretation, he proceeds in his analysis to treat every example of this kind of thing, wherever it might appear in the various media of Soviet communication, as a political token. This leads him, in a great many instances, into over-analysis on the one hand and to strained inference on the other. For example, the author contends, solely on the basis of certain textual differences in the Soviet press, that "in the spring of 1955 Khrushchev's opponents succeeded briefly in restricting the powers of the Secretariat." Yet we learn that in the actual arena of Soviet politics Khrushchev not only won a powerful victory over Malenkov in February but also gained a "very substantial increase in power" by the "strengthening of the Secretariat" at the July plenum. The author also maintains that while Khrushchev made "further great gains" at the 20th Party Congress in February 1956, his influence was "momentarily in decline" one month later. To support this view, the author again relies solely on content analysis of speeches

at the Party Congress. In both instances, the author appears to be unconcerned at the discrepancies between the events and symbols he is observing.

When the hypothesis the author is developing runs into obstacles, fine distinctions give way to bland generalizations. He expends considerable effort, for example, to show that in 1954 a "cult of Khrushchev" was developing. Suddenly the signs he has been observing disappear. "Such efforts to further the Khrushchev myth," he writes, "ceased temporarily, however, at about the same time the World War II military lists stopped appearing; both these cessations may have been the result of a general truce which also replaced rank-listings of Presidium members with alphabetical listings (June 8, 1954)." What does a "general truce" mean? A truce between whom and on what terms and why? Maybe his kind of question can't be answered, but certainly, when the author has brought the reader up to this point through an analysis which depends on finely-drawn distinctions, the reader has a right to expect something more than a quick and easy phrase.

Another serious fault in the analysis — one from which every study of this kind seems to suffer to some degree — is its single-mindedness, expressed mostly in a total disregard for the possibility that factors other than factional rivalry influence policy and the forms of public expression. This is particularly evident in the treatment of Mikoyan's position with respect to de-Stalinization. The author attempts to show that Mikoyan, by his forthright public attack on Stalin at the Party Congress, provided high-level backing for the historians who were attempting to revise Stalinist historiography. This is certainly possible. The author goes on from there, however, to assert that Mikoyan probably continued to back the revisionist historians even when they came under mounting criticism by party organs in the fall of 1956. This, of course, completely disregards the influence which the events in Eastern Europe must have had on the Soviet leaders' attitudes toward de-Stalinization.

The study also reveals a broad streak of legalism, Talmudism, in such ways as its elaborate attempt to show how Khrushchev, seeking Stalin's old post of General Secretary of the party, was forced to settle for the title of First Secretary: initially he was

designated "first secretary," then "First Secretary," and finally "First secretary," all of this purportedly reflecting the ups and downs of his political fortunes. There is, furthermore, an excessive preoccupation with historical analogies through which the author tries to establish a clear pattern for the present, for example the unceasing examination of Khrushchev's standing and motives in terms of a comparison with Stalin's career, with little allowance for the important differences in the circumstances in which the two men acquired and exercised power.

These points are merely intended to illustrate the most serious failings of the study. There is no quarrel with the author's facts, which he has assembled in imposing array, nor with his right to draw inferences wherever he sees fit. But it does seem a shame that the total effort should have been marred, and even vitiated, by the author's infatuation with a device which has its uses but also its limitations.

CHILD OF THE REVOLUTION. By *Wolfgang Leonhard.* Translated by C. M. Woodhouse, with an introduction by Edward Crankshaw. (London: Wm. Collins, Sons & Co., Ltd. 1957. Pp. 447. 25/–. Also Chicago: Henry Regnery Co. 1958. $6.50.)

Child of the Revolution is an English version of a political autobiography published originally by Leonhard in Germany in 1955 under the title *Die Revolution entlaesst ihre Kinder* (The Revolution Dismisses its Children). The word "version" has been chosen deliberately, because this is not really a translation of Leonhard's book. In a translator's note, Mr. Woodhouse states that it "has been abbreviated from the original by the omission of some passages likely to be of less interest to English than to German readers. The responsibility for the cuts is my own. . . ." A quick comparison with the German original shows that it has been cut by more than one third, that substantive passages of interest to the student of Communism have been sacrificed while anecdotal passages of interest to the general reading public have been retained, and—most surprisingly—that the translation of specific passages is not always accurate.

This last criticism is a serious one. No attempt has been made to compare the translation systematically with the original, but a checkback on a few isolated passages which were puzzling at first reading revealed that Mr. Woodhouse is weak in his understanding of present-day idiomatic German. On page 75, for example, his subtitle "Good Resolution in the Komsomol" stands for Leonhard's original "With Good Intentions into [i.e. I Join] the Komsomol." On page 96, describing Leonhard's application for admission to the Moscow Academy of Foreign Languages, Woodhouse has the academy official say (with a sinister undertone which Leonhard did not intend), "Well, we'll soon see what the meaning of that is." Leonhard has him say, "Well, we'll see what can be done." On page 105, Woodhouse has the subtitle "Fresh Questioning of the German Emigrés" for Leonhard's "Deutsche Emigranten wieder gefragt," an idiomatic expression meaning "German Emigrés Again in Demand."

All in all, this "English translation" is a disappointing version of an interesting and informative book; it should be read only by those who are incapable of reading the German original, and then only with the full realization that it is very much cut down, edited with an eye to "popularization," and by no means dependable in its rendering of the German idiom. In an epilogue of slightly less than 5 pages, which is the only new thing about this edition, Leonhard comments on developments in international Communism since 1955. He does not do them justice.

For anyone interested in Communism or Soviet affairs, the Leonhard story is an important one. His mother was one of the German "Old Bolsheviks" (the Spartakus group) who, while she broke with the Third International organizationally in 1925, nevertheless remained far to the Left in the political spectrum. She took her son with her into exile in the Soviet Union from Sweden in 1935 after escaping from Hitler's Germany. Her story has been told—with far more political and ideological maturity than Wolfgang demonstrates—in an autobiography entitled *Gestohlenes Leben* (Stolen Life, by Susanne Leonhard, Europaeische Verlagsanstalt, Frankfurt/Main, 1956).

Wolfgang was placed in a German emigré school in Moscow and later in a Soviet "children's home" for Austrian emigré children; his mother was arrested by the NKVD a little more than a year after they arrived in the Soviet Union, in the course of the "Great Purge." He joined the Pioneers and later the Komsomol, and studied at the State Pedagogical Institute for Foreign Languages. The war with Germany broke out at the end of the first term, and Leonhard was evacuated with other German emigrés from Moscow to Karaganda, where he was served a strong dose of "Soviet reality." Here is where the story becomes interesting for the student of Communism: Leonhard is summoned out of banishment to attend what is destined to be the final course at the Comintern School in Kushnarenkovo, near Ufa (the Comintern was dissolved while the course was in progress), and the chapter devoted to his experiences there presents this aspect of international Communism to the public for the first time. It is a unique and worthwhile body of information; unfortunately, the translator has edited this section, too.

After the dissolution of the school following the dissolution of the Comintern, Leonhard returned to Moscow to work with the "National Committee for Free Germany," the Communist-dominated anti-fascist popular front which was in many respects the successor organization to the German Section of the Comintern and the forerunner of the East German Satellite regime. In his chapter on the National Committee he describes the inner workings of this front, the ways in which the Communists dominated and controlled its propaganda, and to some extent the role of the old Comintern apparatus in the new circumstances (e.g. the Hungarian Ernoe Geroe played an important role in the propaganda work of the National Committee). On April 30, 1945, Leonhard returned to Germany in a special Soviet plane as one of the 10 members of the "Ulbricht group," a handpicked group of leaders whose job it was, under the direction of Walter Ulbricht, to lay the groundwork for the Communist take-over in Germany. Leonhard describes the reorganization of the German Communist Party as it came up from underground in the wake of the Soviet Army, the organization of the local administration, and the beginnings of the Communist state in East Germany now known as the German Democratic Republic. To the student

of Communism in Germany, the chapters entitled "With Ulbricht to Berlin" and "An Official of the SED Central Secretariat" are an important personal source document.

Leonhard played a key role in the political indoctrination system of the East German Communist ("Socialist Unity") Party, and from 1947 until his break in 1949, at the age of 27, he was an instructor at the Central Party Academy of the SED. The last chapter of the story, "My Break with Stalinism," is psychologically revealing not only for Leonhard himself, but for all those Communists who have seen and experienced enough to be plagued by doubts and questions—what Leonhard calls "political bellyaches" and Woodhouse renders as "political collywobbles." This is an approach to disillusionment which compares favorably with Arthur Koestler's classics on the subject. For those with a professional interest in propaganda, the section in which Leonhard analyzes and criticizes Western propaganda efforts to reach and affect the Communist audience is very much worthwhile; unfortunately, Mr. Woodhouse has also seen fit to cut this down. The last part of the story, which could be quite interesting, Leonhard has played down: in fleeing from East Berlin, he chose the somewhat improbable route via Czechoslovakia to Yugoslavia, where he worked in Tito's propaganda apparatus for almost 2 years before going to West Germany, where he now lives. In this respect, Leonhard is an "unicus" among defectors.

In his prologue, Leonhard wrote, "It is . . . my deliberate intention to present every encounter and discussion, every event and experience, exactly as I saw it and reacted to it and felt it at the time. . . ." With all due respect for intentions, the Leonhard story also contains the results of 2 years of life in anti-Stalinist Yugoslavia and another 3 years or more in the West. It is not surprising that *post facto* rationalizations should creep in, but it is unfortunate that Leonhard should attempt to leave his readers with the impression that this is not the case. Nor is he in all cases completely honest with his readers—possibly not even with himself. An example of this can be found in a passage from his mother's story treating her return to Berlin in 1948 after 12 years of NKVD custody, and her reunion with her son; she writes, "He was now called Wolfgang. I used to call him Volodya [nickname for Vladimir, the name she gave him]." He dismisses this point in passing

(on page 100 of the English version): "Volodya (this was the name by which I was known in the Soviet Union). . . ." And his description of his reunion with his mother differs in tone from hers—it shows him in a more favorable light. These are little things, perhaps, but they are insights into the character of a man who was moulded by the Soviet system, rose too high too young, has become famous as one of the earliest (and most genuine) German "Titoists," and is still flattered and sought after as an "expert." Perhaps, with time, his personal and political arrogance will be mellowed.

The prospective reader should not shy away from the Leonhard story because of this critical evaluation of the man. It is an interesting story, it is informative, and it is professionally worth while.

YOU'RE STEPPING ON MY CLOAK AND DAGGER. By *Roger Hall.* (New York: W. W. Norton. 1957. Pp. 219. $3.75.)

Roger Hall wrote this hilarious story during the latter part of his OSS assignment, when I knew him as a most entertaining, albeit somewhat cynical, fellow and the companion of many a pleasant off-duty hour. I was confident then that if he ever published the book it would be well worth the retail price plus federal amusement tax. It is. For those who were in the Office of Strategic Services, the racy account of Roger's two and a half wartime years of service will bring back many amusing recollections of their own; and for those who weren't it provides a colorful story of part of what happened in the OSS, at least to Roger.

He was "rotting away," he says, at Camp Plauche, Louisiana, where his principal activity was playing center field on the regimental softball team, and he feared transfer to an even less desirable post as a result of having "lost a ball in the sun, made a throwing error, and struck out three times in one game." In desperation he volunteered for "hazardous duty" with the OSS. Arriving in Washington, he found the OSS "located midway between a brewery and a Naval hospital which catered to mental cases." He reported to "Q" Building after having been thrown out of the brewery and refused admittance to the hospital, or "it may have been the other way around."

After minor adventures with guards and questionnaires, the new wearer of the OSS cloak was sent via a devious route to a secret "Area F" for guerrilla warfare training. To the utter chagrin of his conducting officer, it developed that Roger, during his carefree civilian days, had intimately known the Area F terrain as the Congressional Country Club. He soon became an instructor and remained in this capacity for about three months. This assignment was followed by a stint at Area B in the chilly western Maryland mountains not far from President Roosevelt's famed "Shangri-La." There the President's trigger-happy Marine bodyguards amused themselves by firing over the heads of the OSS trainees, and "most of the taller men developed a posture problem."

At Fort Benning, Ga., Roger acquired his parachute wings, progressing with precarious bravado through climactic training stages. Returning to Washington, he was sent to Area S for the three-day psychological assessment, where he vanquished the head-shrinkers in mental and alcoholic combat and was approved for assignment to Special Operations.

At Area E, the "Spy School," his final test problem was to penetrate a war plant in Philadelphia without being arrested either as an enemy spy or as a U.S. amateur trainee. Through a series of fortuitive circumstances, and notably the vulnerability of the charming daughter of the plant's vice president, he was eminently successful. He not only succeeded in a complete penetration of the plant but was called on, in his cover capacity as a heroic discharged veteran from overseas, to speak at a war bond rally of the plant workers. Although his previous experience on stage was "one performance as the Dormouse in *Alice in Wonderland* as rendered by Miss Mowery's Kindergarten," he made a stirring speech. "There wasn't a dry eye in the house," and bond sales rose sharply, according to a glowing account in the morning paper.

After a few wild days in Washington, he was pronounced physically fit and dispatched overseas. In London he endured with impatience the OSS bureaucracy until eventually, with immense build-up of suspense, he was parachuted into France — behind the *U. S.* lines!

Bitterly he returned to England and got assignment to the Norso Group, training for a jump into Norway at the renowned

jump school in Scotland. After endless delays, they jumped after V–E day onto a Norwegian runway lined with thousands of Germans. Roger forcefully quelled the arrogance of the German commanders and accepted their surrender as befitted a conquering hero.

COMBAT, Histoire d'un Mouvement de Resistance de juillet 1940 a juillet 1953. By *Marie Granet* and *Henri Michel.* (Paris: Presses Universitaires de France. 1957. Pp. 328. 1000 fr.)

This book is the latest in the official series *"Esprit de la Resistance"* which seeks to portray in scholarly documented fashion the aims and purposes of the French Resistance both on the plane of individual sacrifice and on that of national significance.

The *Combat* movement was conceived in 1940 in Southern France in the mind of an escaped but not demobilized Captain Henri Frenay, who began to ask himself what he could do for his country so recently ground ignominiously under the Nazi heel. The book traces the growth of this idea and its development into a well-coordinated unit finally absorbed into *Mouvements Unis de Resistance* in 1943.

It is always difficult to write of a period of history which was not recorded at the time by the participants. In this case the authors have interviewed 138 persons connected with the *Combat* network during the occupation. The reader can assume that most of the facts presented in the book are accurate; there are no attempts to personalize or color the narrative. This does not prevent the book from being an absorbing, at times exciting, account of the problems of this period.

The most interesting sections are those which show the growth of *Combat* into an organized group with separate organs for propaganda and action. By 1942 it had become well enough known to draw the attention not only of the Germans but of the Gaullist leaders in London. The latter dispatched an agent to France to coordinate the various resistance groups and to ensure the carrying out of directives from London. Relations were not always smooth between London and the leaders of *Combat* whose authority had been earned directly

on the scene. The book pays grudging tribute to the diplomacy and organizing ability of Jean Moulin, the coordinator sent from London who until his capture by the Germans was able to obtain to an extraordinary degree the adherence of totally disparate elements sometimes hostile to the London program. In the opinion of the writers the American authorities were generally misinformed during this period concerning conditions in occupied France; their early attempts to use unacceptable leaders are cited as evidence of this point.

The official entry of the Communists into the *Mouvements Unis de Resistance* is worthy of note. The French Communist Party had maintained a "defeatist" attitude at the beginning of the war, but from 1941 had regained lost respect through "the courage of the Communist militants in action against the enemy and the brutality of the repression of which they were the object." When the Resistance grew in 1943 from a spontaneous movement to an administered one, each participating group had to be represented on the newly created *Conseil National de la Resistance,* and the Communists thereby acquired legality and respect which they were to wield with great effectiveness for many years to come.

Frenay had realized that the emergence of individual political party influence was inevitable as the resistance organizations increased in strength and entered the *Mouvements Unis.* In the resistance councils in France, London, and Algiers there began to appear the political alignments which governed France at the time of the liberation and after. In many person's opinion the building of this bridge to the mistakes of the past was one of the greatest political errors of General de Gaulle. A consideration of the extent to which the spirit of sacrifice and goodwill engendered by the Resistance has been dissipated since the liberation lends considerable support to this belief.

WE SPIED . . .

There were a few books published in the last weeks of 1957 which should receive mention even at this date. Some of them are reviewed at greater length elsewhere in this issue—*Air Spy*, by Constance Babington-Smith, *Child of the Revolution*, by Wolfgang Leonhard, and a good book on the French resistance, *Combat*, by Marie Granet and Henri Michel. Michel, Secretary General of the official French *Comité D'Histoire de la 2e Guerre Mondiale*, is probably the outstanding authority on the French resistance.

Resistance in Denmark

One of the best books written on World War II resistance movements is *The Savage Canary: The Story of Resistance in Denmark*, by David Lampe.[1] In writing this book Lampe talked with many of the leaders and participants in the Danish resistance. Although intended for popular consumption, the book contains much interesting tradecraft. It tells, for instance, how the radio equipment parachuted into Denmark by the British SOE in late 1942 and early 1943 was too large to be transported without suspicion, had to be operated on alternating current in a country where almost all power was direct current, and used transmitter tubes of a kind that could not be replaced in Denmark. The Danes finally persuaded SOE to let them train their own operators in Denmark and build their own transmitters with British frequency crystals parachuted in. The Danish success in this field makes an interesting chapter.

Other tradecraft dealt with in *The Savage Canary* includes documentation, air/maritime support, and sabotage. The escapes of resistance leaders and the resistance of student groups and the medical profession are also described, and some discussion is devoted to the subject of intelligence collection by the resistance.

One of the best sections deals with the bombing of Shell House, the headquarters of the Gestapo. This pinpoint bombing raid of a building in the middle of Copenhagen, led by Air

[1] London: Cassel & Co. Ltd., 1957. 236 pp. 18/–.

[redacted]

Vice-Marshal Embry, required the greatest care: it was necessary to bomb Shell House at its base, as the attic housed 25 captured members of the Danish resistance. After careful deliberation it was decided that Shell House must in any event be destroyed because it contained the Gestapo records, including dossiers on members of the resistance and other key Danes. The bombing took scarcely four minutes. The Danes in the attic escaped and the Gestapo records were wiped out. Another good chapter deals with the resistance-aided escape of the atomic scientist, Dr. Nils Bohr, from Denmark. No escape could be more fateful to mankind than this one. This book is well worth reading.

US Communists and the FBI

The press has carried many favorable reviews of J. Edgar Hoover's *Masters of Deceit*.[2] The Director of the Federal Bureau of Investigation wrote this book largely for popular consumption, and it is indeed climbing to the top of the best-seller lists. As Mr. Hoover says in his Foreword, the book

> attempts, in almost primer form, to set down certain fundamentals of the day-to-day operations of the Communist Party, USA: how a communist meeting is conducted; how a top Party official lives; what goes on in the underground; how discipline is enforced; how Party members collect money, attend indoctrination schools, hand out propaganda leaflets. Party members are shown organizing agitation campaigns, infiltrating noncommunist organizations, and manipulating communist fronts.

For young officers who are coming to grips with the communist apparatus for the first time from a professional angle, no better primer could be supplied. For those who are inclined to dismiss CPUSA as insignificant because it may be small in numbers, *Masters of Deceit* supplies many insights into the effectiveness of a dedicated few and into what lurks just below the surface of a legal organization.

Of particular interest in *Masters of Deceit* are Parts V and VI on "The Communist Trojan Horse in Action" and "The Communist Underground." The latter describes how the underground works, how it carries out espionage and sabotage. Part V deals with communist strategy and tactics, mass agitation, infiltration, fronts, and the attack and exploitation of minorities. In a book of this kind the Director of the FBI cannot unlock its secret files, but he has succeeded in citing enough examples to give the work a very realistic touch.

[2] J. Edgar Hoover, *Masters of Deceit: The Story of Communism in America and How to Fight It.* New York: Henry Holt and Company, 1958. 374 pp. $5.00.

Bughouse and Bedside

While intelligence is a serious business, some classics have been written in this field with a heavy accent on humor or the spoof: you recall Compton Mackenzie's *Water On the Brain* and Beverley Bowie's *Operation Bughouse*. To these can now be added *You're Stepping On My Cloak and Dagger*, by Roger Hall, a hilarious book about Hall's activities in the OSS which is reviewed elsewhere in this issue. In somewhat the same category is *The Spy's Bedside Book*,[3] edited by Graham Greene and his brother, Hugh. Obviously this is a volume which no professional can afford to leave off his bedside table. Perhaps its most amusing feature is the back of its jacket, with its advertisements for hair stain, false eyebrows and eyelashes, and a lotion to train, fix and beautify the moustache. And on a perforated page in the back is a form letter to the publisher which reads in part:

> I should like to take advantage of your offer to supply to any authorized agent of a foreign government copies of *The Spy's Bedside Book* at the ordinary trade discount. I guarantee that these copies . . . will be used only for the proper purposes of our Secret Services.

The book itself consists of extracts, varying from sentence-length to the better part of a chapter, from some of the classics of intelligence literature, both factual and fiction. These extracts are divided into various categories, such as "Hazards of the Profession," "Unexpected Encounters," "Professional Perquisites," and "Tricks of the Trade." Here we meet such old friends as Cicero, Major Andre, Baden-Powell, Mata Hari, Dreyfuss, Petrov, and Schellenberg. Some sections of the book are funny and some are serious; much of it is ironical. The publisher's blurb on the jacket points out that "The foxhunter, the angler, the cricketer, the lover—each has had his own bed-

[3] London: Rupert Hart-Davis, 1957. 256 pp. 15/–.

side book. Why not the spy?" Why not, indeed? Because your reviewer has no satisfactory answer, he calls this one to your attention.

As a matter of reference, one should take note of *The Fateful Years: Memoirs 1931–1945*, by Hugh Dalton,[4] Chancellor of the Exchequer in Great Britain's post-war Labor government. In 1940, with the advent of the Churchill government, Dalton had become the Minister of Economic Warfare, a post he held until February 1942, and two of his chapters deal with this tour of duty. The present reviewer must confess to finding them disappointing. Mr. Dalton does not write with any modesty about his role nor in very great detail about what went on. He relies heavily in his footnotes on *The Economic Blockade*, by W. N. Medlicott, one of the official British series, "History of the Second World War." In July 1940 Dalton also took charge of the Special Operations Executive (SOE), then in its infancy, but the chapter which he devotes to this subject is, perhaps necessarily, rather sketchy. It is principally Dalton's position which makes his book noteworthy.

Brief Mention

Attention is called also to the following recently acquired books on various aspects of intelligence:

BURSTEN, Martin A. *Escape from Fear.* Syracuse, New York: Syracuse University Press, 1958. 224 Pp. $3.50.

Accounts by participants and eye-witnesses of the Hungarian Revolt of 1956, how they escaped, and how they were received in the United States and other nations of the free world. The author is a journalist and Public Relations Director of United Hias Service, an immigrant aid society, and was assisting on the Austrian border and in Vienna during the revolt.

COLLIER, Richard. *Ten Thousand Eyes.* London: Collins, 1958. 320 Pp. 18/–.

The activities of the French Resistance in stealing the secrets of the Nazi defenses in France, particularly in the area between Cherbourg and Le Havre.

[4] London: Frederick Muller, 1957. 493 pp. 30/–.

CONNELL, John. *The "Office": A Study of British Foreign Policy and Its Makers, 1919–1951.* London: Allan Wingate, 1958. 367 Pp. 25/–.

The last chapter of this book is devoted to the case of Burgess and McLean, the two British foreign service officers who defected to the USSR. The author is book critic of the London *Evening News*.

FONROY, J. H. *La Bataille Des Services Secrets.* Paris: Editions Du Milieu Du Monde, 1958. 284 Pp.

This book, which appears to have been written for popular consumption, includes historical material on various aspects of espionage. Also included are chapters on espionage under Napoleon, the case of Colonel Redl, Mata Hari, and Cicero.

KINTNER, William R., in association with Joseph I. Coffey and Raymond J. Albright. *Forging A New Sword: A study of the Department of Defense.* New York: Harper & Brothers, 1958. 238 Pp. $4.50.

Kintner and Coffey are both Colonels in the United States Army. Albright is a foreign affairs officer in the Office of the Secretary of Defense. This is a controversial book which outlines many critical problems in the organization and activities of the Department of Defense, including waste and duplication of effort, inter-service rivalry, lack of coordination, and concern with fiscal matters. It also also contains material on the role of the National Security Council, its Planning Board and Operations Coordinating Board, and the Central Intelligence Agency.

KLEIN, Alexander. *The Counterfeit Traitor.* New York: Holt, 1958. 301 Pp. $3.95. and London: Frederick Muller Ltd., 1958. 18/–.

This book describes the espionage activities of Eric Erickson, an American who became a Swedish citizen. An oilman, he assumed a pro-Nazi pose which allowed him to travel in wartime Germany. As a result he secured valuable information for the Americans for use in bombing the German oil refineries.

WILKINSON, Laurence. *No Fruit More Bitter.* London: Heinemann, 1958. 252 Pp. 25/–.

The author is a newspaperman, presently with the London *Sunday Express.* This book is the story of the seizure of the Rumanian Legation in Berne by four anti-Communist Rumanians. Wilkinson talked with the raiders, attended their trial in Berne, and also talked with many others in preparing this book.

For those who like the small, pocket-size paperbacks, attention is called to two good ones.

HOWARTH, David. *Escape Alone.* London: Collins (Fontana books), 1958. 190 Pp. 2/6.

This book was originally published in 1955 in New York and London under the title *We Die Alone.* The author was second in command of the base in the Shetland Islands from which Norwegians sailed to the mainland of Norway in support of the resistance, espionage, and sabotage operations. This book tells the story of Jan Baalsrud, the sole survivor of one such sabotage mission ambushed by the Germans. Baalsrud evaded capture for two months in the Arctic and finally made his way to Sweden. It is an epic story of evasion and survival.

MINNEY, Rubeigh James. *Carve Her Name With Pride.* London: Pan Books Ltd., 1958. 191 Pp. 2/6.

Originally published in London in 1956, this book tells the story of Violette Szabo, with emphasis upon her activities with the French Resistance during World War II. After the D-Day landings, she was captured, tortured, and sent to Ravensbruck Prison Camp, where she was shot by the Nazis in the closing days of the war.

SECRET

STUDIES in INTELLIGENCE

VOL. 2 NO. 3 SUMMER 1958

CENTRAL INTELLIGENCE AGENCY

OFFICE OF TRAINING

SECRET

All opinions expressed in the *Studies* are those of the authors. They do not necessarily represent the official views of the Central Intelligence Agency, the Office of Training, or any other organizational component of the intelligence community.

WARNING

This material contains information affecting the National Defense of the United States within the meaning of the espionage laws, Title 18, USC, Secs. 793 and 794, the transmission or revelation of which to an unauthorized person is prohibited by law.

STUDIES IN INTELLIGENCE

EDITORIAL POLICY

Articles for the **Studies in Intelligence** *may be written on any theoretical, doctrinal, operational, or historical aspect of intelligence.*

The final responsibility for accepting or rejecting an article rests with the Editorial Board.

The criterion for publication is whether or not, in the opinion of the Board, the article makes a contribution to the literature of intelligence.

CONTRIBUTIONS AND DISTRIBUTION

Contributions to the *Studies* or communications to the Editor may come from any member of the intelligence community or, upon invitation, from persons outside. Manuscripts should be submitted directly to the Editor, Studies in Intelligence, Room 25X1 2013 R & S Building [redacted] and need not be coordinated or submitted through channels. They should be typed in duplicate, double-spaced, the original on bond paper. Footnotes should be inserted in the body of the text following the line in which the reference occurs. Articles may be classified through SECRET.

For inclusion on the regular *Studies* distribution list call your office dissemination center or the responsible OCR desk, [redacted] 25X1

25X1 [redacted] For back issues and on other questions call the Office of
25X1 the Editor, [redacted]

CONTENTS

UNCLASSIFIED ARTICLES

CONTRIBUTORS TO THIS ISSUE

Gordon M. Stewart is CIA's Director of Personnel. ILLEGIB

George W. Wright, a CIA analyst, was recently commissioned to make one of a series of studies of the Agency's central reference facilities.

25X

Davis B. McCarn is

Martin L. Schatz is a psychologist with several years of experience in overseas operations.

W. A. Tidwell is a CIA senior staff officer charged with developing new approaches to old problems.

Ralph Riposte is an intelligence officer with responsibility for various aspects of covert operations. 25X1

Don Compos is

Guy E. Coriden is the executive secretary of the IAC Ad Hoc Committee on Exchanges.

Amerikanskiy Turist is 25X1

J. J. Bagnall is Chairman of the IAC Committee on Exploitation of Foreign Language Publications.

25X1 Roland A. Way for several years headed

Edwin C. Fishel is an analyst
25X1

Stefan Borowy is
25X1

Myron Rush, a specialist in Soviet affairs for the Rand Corporation, is the author of *The Rise of Khrushchev,* reviewed in the Spring 1958 issue of *Studies.*

How CIA has come to select its general officers largely from the ranks of its experienced specialists.

WHAT IS A GENERALIST?

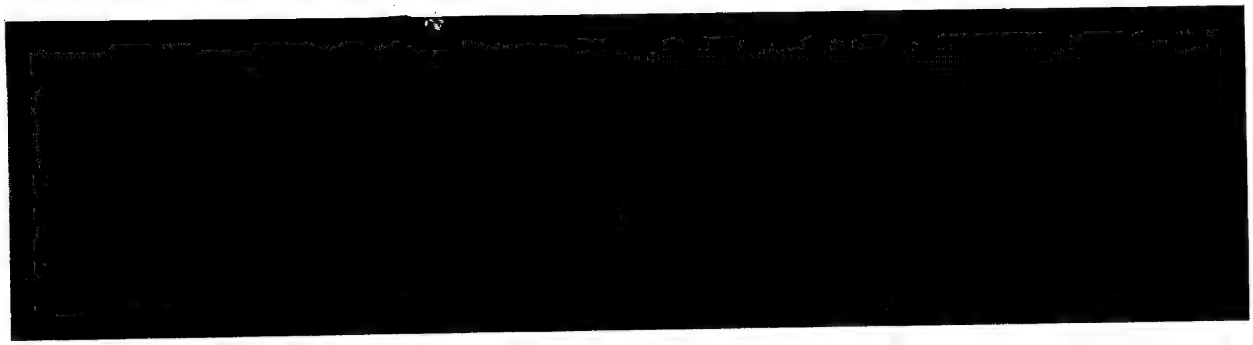
Gordon M. Stewart

The word generalist as it is used by intelligence people has no fixed and useful meaning. It suggests a number of ideas which, for the most part, have been imported from other walks of life: from the military services we derive the concept of the general staff officer; from medicine, the general practitioner; from business, the manager; and from the world of scholarship, the synthesizer. And it must be admitted that an element of bias creeps into any discussion of generalists in intelligence. Most of us tend to line up for or against them. The result of this is that people beginning a career in intelligence have a hard time deciding upon long-range goals. They fear that the old hands will reject them if they try to become generalists and that they will run the risk of being tucked away and forgotten if they specialize. These fears, it will be seen, are largely the result of misunderstanding.

It is my purpose to describe the generalist in the light of what is known at the present time about career development in the field of intelligence. The need for qualifying this description and limiting it to the present is apparent if one turns to earlier discussions of this subject. The definitions of generalist and specialist that were current as recently as six or seven years ago must be set aside in the light of our experience, and it may be expected that our views will change in the future.

In a paper entitled "A Program for the Establishment of a Career Corps in the Central Intelligence Agency" dated 7 August 1951, the following paragraphs were written on the subject of generalists:

> "Generalists are those very rare individuals who have the capacity to bring together many aspects and branches of the intelligence problem and organization, and wish to do so. Their need is not for specialized training, but for increasing areas of responsibility and experience on the one hand, and for rotational experience within the Agency, as



well as in other intelligence agencies and other governmental agencies which have mutual intelligence needs.

"Whereas the purpose of Specialist Career Training is to produce better specialists, there is considerable doubt that any particular effort should be made to improve the special skills of the generalists, excepting to broaden their language ability, increase their first-hand knowledge of important foreign areas, and to give them enough experience in the various offices of the Agency and other intelligence agencies so that they can understand their products, and know their limitations and capacities.

"Therefore, while a high percentage of this group will have benefited as specialists from . . . training . . . before they have been identified as generalists, an entirely new emphasis must subsequently be placed on their career development. The purpose of their training is to produce Directors of Central Intelligence, Deputy Directors of Central Intelligence, Assistant Directors, and Deputy Assistant Directors, Assistants to the Director, members of the National Estimates Board and other key people."

Clearly, the Agency considered making a relatively early selection of those persons who were to be developed as generalists and then planning their careers in such a way that from among their number the top management of the Agency could be drawn. The career pattern for the generalist was to be something like this: duty with Army, Navy, Air or State; rotation in CIA; assignment to ONE or OCI; rotation in CIA; National War College; assignment to the NSC; rotation in CIA; and, finally, graduate studies in the field of intelligence.

At the same time the generalist was pursuing this course of development, a carefully selected group of specialists would be developed by each of the major intelligence areas in the Agency, and it was expected from among the ablest of the specialists the top positions in these areas would eventually be filled.

These proposals for Agency personnel management were never formally adopted, partly because there was something too artificial and self-conscious about the early designation of individuals as generalists, but even more because of the pressure of work in the Agency. Since 1951 we have undoubtedly been influenced by the experience of others in the field of personnel management. The report of the Secretary of State's Public Committee on Personnel dated June 1954 described the trend in management thinking as follows:

"Banks and industrial firms and commercial concerns used to develop 'generalists' for top management posts by moving promising talent through different departments. The idea was to familiarize a promising man with the different operations of a business. That practice, however, has been all but abandoned by large-scale private enterprise—first by business, not much later by the banks, and finally by universities. Prevailing management practice today emphasizes the development of an individual around his specialty, with the generalism coming later as he approaches full maturity."

The report also pointed out the great importance of bringing men of stature and experience into the Foreign Service at higher levels. Although our experience and our needs are somewhat different from those of the Foreign Service, we too have found in practice that there are two types of generalists: those who have entered intelligence work at a relatively high level and those who have first achieved status as specialists and later have become generalists.

We need devote but little attention to the former category, important as it is. Intelligence needs the infusion of new blood not just at the lower level but at the medium and higher levels. The fact that intelligence is coming of age is no reason to close the door to the great resources of talent and competence represented in industry, in the academic world and among professional people in and out of government. Further, by bringing in outstanding men from time to time, we will prevent intelligence from falling behind in those fields in which American progress is so intimately associated with the interests of national security: in science, in technology, in management and in the social sciences.

At the same time, any strong and cohesive service will necessarily try to develop a major share of its leadership from the ranks, and in intelligence this means from among its qualified specialists. To do this, it will need to convert a certain number of specialists into generalists.

Let us, therefore, begin with the specialist. The specialist, as contrasted with the apprentice or technician, is a man who has developed specialized competence and recognized standing in one or several of the broad fields of intelligence: espionage, counter-espionage, overt procurement or analysis. He is a creative worker and is, above all, reliable in the sense that he

is a known quantity. Within his field he works efficiently because he has a grasp of the factors that bear on his assignment. He deals easily with other intelligence elements, using what they can offer in the furtherance of his work. His knowledge of the intelligence process is broad and his ability to judge results in fields other than his own is at a high professional level.

The specialist may be a case officer, an analyst, a reports officer; or he may manage case officers or analysts. He may also be in charge of all of the administrative machinery associated with a substantial intelligence undertaking. Promotion to an important supervisory position is not tantamount to conversion to a generalist. Wide areas of the intelligence community are entirely dominated by the purest of specialists and it is in these areas that the most valuable work is done.

This is what makes conversion from specialist to generalist difficult. There tends to be built up among any really good group of specialists an attitude of self-satisfaction and a spirit of defense against all comers. Among intelligence people there exists the strong belief that there is no place for generalists. Are not all of us regarded as specialists by people outside of the intelligence community? Then why not fill our top positions with high-caliber specialists and let it go at that?

Harold J. Laski provided what is perhaps the best answer to this question 28 years ago in an article in *Harper's Magazine.*[1] He said that expertise sacrifices the insight of common sense to intensity of experience. It breeds an inability to accept new views from the very depth of its preoccupation with its own conclusions. It sees its results out of perspective by making them the center of relevance to which all other results must be related. It has, also, a certain caste-spirit about it, so that experts tend to neglect all those who do not belong to their own ranks.

If Laski had been writing about U.S. intelligence *anno* 1958, he could not have come closer to the mark. These are, indeed, the characteristics of the intelligence specialist; characteristics that many of us have long since recognized in ourselves and in our colleagues. They are the price we pay for effectiveness at the cutting edge.

[1] *Harper's Magazine,* December 1930, pp. 101–110, "The Limitations of the Expert"

But there is another side to intelligence. There are constantly at work broadening influences which over the years have left their mark on a good many men. First among them is variety. Over a period of time an intelligence officer is introduced to many of the factors bearing on national security or related to the overseas interests of the government. He has a front-row seat at the biggest show in our time. The extent and breadth of his intellectual development is limited only by his ability and willingness to learn.

Overseas, the experienced intelligence officer may be called upon to deal with men in very high positions in government, business or the professions. These relationships are not infrequently of an intense and revealing nature. They have proved to be of great value in the cultivation and growth of our people.

The structure of American clandestine activities, involving controlled competition and requiring as it frequently does the coordinate efforts of several agencies, is a permanent counterpoise to excessive parochialism and self-satisfied narrowness. It also makes a demand on the managerial skills of those who engage in joint efforts, for there are intrinsic inefficiencies to be overcome in any attempt at governmental teamwork.

Certainly the type of assignment and the type of training planned for the generalist seven years ago can provide valuable experience. These opportunities do not come in as concentrated doses as originally foreseen, but they come. Very often in making selections for the advanced schools the question of a man's ability to grow is carefully weighed, and in this sense the original purposes of the career development planning done in 1951 are kept alive.

Then, finally, in the conduct of our business it is necessary to move men from one field of specialization to another. Two elements dictate this: the shifting pressures of work and the recognized need to provide men with wide experience. This process does not, of course, operate at the rate that many would wish nor, necessarily, at the rate that it should. Intelligence has a long way to go in the development of its doctrine of manpower utilization. Nonetheless, in its few years of existence, intelligence has offered a wide variety of experience to a substantial number of men.

These, then, are the broadening influences that may affect the outlook of an intelligence officer and move him in the direction of generalism. They are at work long before the question arises whether or not a given man should become a generalist. Indeed, they are in one degree or another common to the experience of all senior specialists. The final step from specialist to generalist would appear to involve a large measure of self-selection. A good number of our ablest intelligence officers remain specialists despite broad experience and outstanding success in different assignments. Those who take the step do so gradually. A man may be a practicing generalist, that is "one who devotes himself to general rather than specialist aptitudes or deeds," and yet for some time align himself with the specialists. But the change proceeds nonetheless, with the result that intelligence is constantly and imperceptibly gaining leadership from the ranks. Among these new leaders are to be found the true intelligence generalists.

A new DCID makes timely this critical review of CIA's reference facilities with recommendations for improvements in an eventual federal system.

TOWARD A FEDERAL INTELLIGENCE MEMORY

George W. Wright

The problem of storing an ever mounting accumulation of raw intelligence information and maintaining ready access to assorted needles in this haystack is one of the most baffling in the whole field of intelligence management. It is particularly difficult in CIA, where it is necessary to provide community-wide reference services and where no categories of data are excluded from the collection. The problem has been attacked manfully and partial solutions have been achieved; but these solutions have not kept pace with the growing mountain of documents and the sharpened requirements of intelligence analysts. CIA analysts still fall more or less frustrated between the impossibility of keeping adequate personal files and the deficiencies of the central reference service.

It is the purpose of this article to examine the central reference problem critically from the substantive end-user point of view, keeping in mind the intellectual processes and the methodological problems involved in the production of finished intelligence. This is an opportune time for such an examination in view of the new DCID 1/4 creating a permanent IAC Committee on Documentation. The new directive enlarges somewhat upon past community-wide approaches to this problem, and looks toward an integrated community system of compatible individual agency reference services—toward a unified federal intelligence Memory. The Committee will seek to develop appropriate relationships within such an integrated system, so that individual structures may function harmoniously and usefully within the framework of the whole.

The framework to be provided for the federal intelligence Memory would seem to have five theoretical functions:

Function I: *It should integrate the information handling capabilities of all intelligence agencies and other special collections as sub-sets of a federal reference system.* As a corollary of this function, and specifically to facilitate interchange and wide use of all raw intelligence information, the central framework must insure compatibility in the development of information handling systems and equipment within individual agencies.

Function II: *It must insure that raw data from all sources, both open and classified, can easily be brought to bear selectively upon any given substantive problem.* This is the basic requirement from which derive such procedural problems as how to deal with the flow of information from any particular agency or source. The function presents difficult problems in the development of adequate techniques for dealing with current unclassified literature.

Function III: *It should insure that the central reference service is responsive to intelligence priorities, not just to frequency of demand.* Factors underlying such responsiveness include the form of document storage and directness of access thereto; the techniques of search in indirect access and the resulting speed, completeness, and relevance of document retrieval; and the provision of special collections. As a corollary the central framework must provide for placement of document collections and indexing devices within IAC agencies in accordance with needs deriving from their assigned responsibilities and for the maintenance of a central all-source collection in CIA for internal and community use.

Function IV: *It should seek to solve the problem of dealing simultaneously with several high priority requests which require the same files, equipment, or personnel.*

Function V: *It should provide for continuing consultation with users as a basis for improving procedures and should furnish oral and written guidance to users to enable them to employ the facility as effectively as possible.*

In moving from theoretical functions at this level toward more specific management problems within the Memory, there is always a danger of losing the orientation to research and substantive services in favor of procedures and approaches which facilitate internal housekeeping. The discussion which follows will attempt to retain the end-user point of view, and

above all to keep in mind the reasoning and discriminate judgments which go into the development of intelligence products. The present analysis, however, does not get into the important related problems of formulating information requirements or of collecting and evaluating information in the field. Rather it deals with the general problem of facilitating the use of that information which has been sent to the central Memory.

Basic Problems of Information Storage and Retrieval[1]

It is generally recognized that intelligence draws heavily on open-source information, and that the unique element in intelligence research is the careful assimilation of open-source and classified information into a timely, all-source analysis. This requires the systematic treatment of myriad incoming documents, periodicals, and books.

The intelligence reference function is differentiated from ordinary reference services primarily through its servicing of needs for classified documents. Although calls on these documents have in CIA experience constituted considerably less than half the reference requirements, the importance of classified documents to the intelligence officer and to the policy maker is inestimably greater than this proportion would indicate. Their importance derives from a substantive content not available in open sources, from their timeliness, and from the reliability of controlled sources.

The approach to handling these documents is consequently of fundamental importance in a system of information storage and retrieval, but the same logic of approach extends to incoming unclassified materials as well. In both types there are

[1] Technical note: Although this article, for simplicity's sake, frequently refers somewhat loosely to "information" storage, it actually means "document" storage. Information storage and retrieval in the technical sense applied to modern electronic computers is in use in some areas of intelligence—SAGE and some aspects of war gaming are examples—and feasible for certain others, but information storage and retrieval in this sense can never fully replace the basic raw intelligence document collections. The reasons are very complex. Suffice it for our purposes here to say that the processes for producing finished intelligence must continue to challenge the sources, to apply consistency tests to fragmentary information in the basic documents, and to apply other varying criteria in order to assess the credibility of the information and to arrange the information into ever more meaningful patterns.

ILLEGIB

three primary substantive dimensions by which they can be organized—namely, *time*, *country* (or area), and *functional content* (politics, economics, military subjects, science, etc.) In both types also there are two general difficulties which cannot be overcome completely or adequately by any simple overall system. One is that the *full* significance of all the content elements cannot be recognized or understood, even under optimum conditions, immediately upon receipt of the document for interpretation or processing. We shall call this the Limited Immediate Recognition Problem; it is discussed further in examining indirect access techniques below. The other difficulty is that any given document may refer to numerous countries or to numerous functional fields of knowledge. This difficulty, which we shall call the Multi-Country/Multi-Function Problem, precludes the development of special collections of all relevant materials for each possible subsequent research project.

It is largely these two general problems—Limited Immediate Recognition and Multi-Country/Multi-Function—which make exclusive reliance on analyst files impossible as an over-all system and make multiple access to a central document file necessary. The Limited Immediate Recognition Problem makes *direct* substantive access to intelligently organized central files of the raw intelligence reports necessary in a system designed to insure maximum utilization of available information. With these considerations in mind let us turn to the maintenance of the federal intelligence Memory and to the three main determinants of its capability: document storage—form and logic; indirect access techniques; and supplementary capabilities and special collections.

Document Storage — Form and Logic

The central reference system, with its huge and ever increasing volume of material, is forced to use some kind of photographic reduction of the hard copy documents it receives,[2] one important device now in use being the aperture card which holds up to ten frames of microfilm. But photoreduction brings the user immediate and immense disadvantages: he

[2] The files of individual research offices, in the form of hard copy, must, because of the space they occupy if for no other reason, remain "gem" collections, rather than complete documentation over any long period. The two general problems mentioned above obviously join the conspiracy against completeness in an analyst's file.

often cannot get a recent document from the federal Memory until it has been microfilmed, mounted and coded; under some storage systems he must resort to some index device to identify and locate appropriate documents; he can look at a document only through a viewer or in re-enlargement; he cannot easily compare it with other documents. For these reasons it is clear that exclusive reliance on photoreduction in the Memory tends to restrict utilization of raw intelligence documents. An obvious way out of this difficulty is to adopt parallel hard copy and photoreduced files for the current year, while the documents are most in demand, and discard the hard copy only when it is say one year old.

The logic of the filing arrangement for raw intelligence documents is one of the most critical determinants of the federal intelligence Memory's capability, affecting as it does the amount of material concentrated for direct access by the analyst. The present arrangement of filing raw documents by central acquisition dates within their respective issuing agency series scatters through the entire document collection the associated reports from a given country. The analyst who wants one particular report and knows the issuing agency and number has immediate access to it, at least in theory; all others, whether area or functional specialists, must resort to search by one of the varieties of indirect access indexing techniques, all of which have significant limitations (see below). A filing arrangement by country of origin,[3] on the other hand, with a second breakdown by issuing agency in chronological sequence, would provide direct and immediate access for country specialists and would similarly serve functional specialists in some measure, to the extent that issuing agencies specialize each in its own functional field. Certainly the current hard copy files urged above should have this arrangement, and its advantages would extend also to the photoreductions of older material unless parallel hard copy files are to be maintained indefinitely. An incidental but important characteristic of this system is

[3] There are certain applications problems involving unusual characteristics of the various issuing agencies which must be worked out. The main requirements are that each reporting series be kept homogeneous, and that cables and dispatch series be kept separate. The theoretical problem can be best handled by a centrally-designed prefix numbering system covering at least three variables, agency, country (or post), and means of transmission (cable or dispatch).

ILLEGIB

that it is open-ended and permits the addition of other classified series such as photointelligence as well as of parallel open-source series such as FBIS (rearranged chronologically by country of origin), newspapers, and foreign affairs material from unclassified wire services.

This simple alteration of the primary filing arrangement would thus provide some very important substantive advantages while offering no substantive disadvantages and few if any internal housekeeping disadvantages within the Memory. The new logic largely copes with the Limited Immediate Recognition Problem by permitting, when appropriate, immediate and direct recourse to primary document files for indefinite periods by country of origin and by issuing agency. The Multi-Country/Multi-Function Problem is still with us in a large measure, however, and we shall need some other device unless we wish to rely on the analysts' experience to suggest what other country files should be looked at for a particular research project.

It is primarily to solve the Multi-Country/Multi-Function Problem, and especially to go into the myriad details of certain functional fields such as economics and the military, that indirect access techniques have been devised. It must be recognized at the outset, however, that all such efforts are impaired by the Limited Immediate Recognition Problem in a manner which cannot be fully compensated for in these indirect methods. The indirect methods, nevertheless, are necessary elements of any over-all system designed to overcome the deficiencies which cannot be removed by improving the organization of the primary document file.

Indirect Access Techniques

There are two general types of devices for indirect access: the abstract,[4] which has its conventional meaning of a brief general summary, and what we shall call the "code form," which indicates the specific categories of information contained in the counterpart document. (These devices may be used singly or in combination, and either or both may be combined with the basic document under some sophisticated systems involving photoreduction.) Both devices can handle the Multi-Country Problem and therefore complement the proposed new file logic for document storage; and the code form is well suited to cope with certain types of detailed functional content as well. Another great advantage of the code form in application to large volumes of material is that it lends itself to machine search.

[4] The abstract as a form of indirect access appears to have in isolation rather limited substantive value when applied to raw intelligence documents, which frequently are sketchy, fragmentary, and disjointed. Its most important application is to unified, coherent, journal-type articles as in the Chemical Abstracts series and to finished intelligence studies. In raw intelligence report applications the abstract adds but little to the code form if the latter is applied satisfactorily. Intelligence reporting, however, probably should be standardized to provide an abstract or summary in the first paragraph.

In theory, machine search rapidly works out the implications of current information-selection instructions on past document classification decisions. Machine search proper enters the process after master code categories have been established and after the content of incoming documents has been matched against these code categories. The over-all system is thus designed to permit the substantive and security classification of incoming documents on a routine basis, so that when an intelligence project is levied the substantive analyst can ideally obtain without delay (Speed Test) a group of documents comprising all those in the system which contain relevant information (Completeness Test) and no document which does not contain relevant information (Relevance Test). Unless the documents are attached to or associated with their counterpart code forms, the research analyst obtains a list of relevant document citations from which he orders retrieval[5] from the document file. There is some tendency toward incompatibility between completeness and relevance—to assure completeness one often must risk some irrelevant documents—and sophisticated systems permit the user to lean in one direction or the other according to his project needs. The greater the number of digits in the classification code, the greater the selectivity for the research analyst and the greater the speed advantage of sorting by machine.

[5] The Intellofax system, discussed below, combines the abstract and the code form. After machine search has been completed, a researcher then, on the basis of the counterpart abstracts, has the option of *not* retrieving some documents which machine search found to be relevant. The rationale of inserting this option is not obvious in past applications of the abstract.

ILLEGIB

Retrospective machine search systems, however, are only as effective as the external human judgments which select the pigeonholes for the incoming documents on the one hand, and as the external judgments which decide what pigeonholes to empty for the analyst's request on the other. All retrospective machine search systems, in fact, have three sensitive points—the master code, the document analysts or coders, and the search instruction writers—which limit the efficiency and reliability of recovery built into the actual searching techniques.

The Intellofax machine search system used by the CIA reference service for handling classified documents has been severely criticized on the ground that it is unreliable, unselective, and costly, and that it is incapable of providing, conveniently if at all, some important services which are desirable in a federal Memory. The unreliability and lack of selectivity stem in a large measure from lack of progress in the initial coding of incoming documents, the notable exception being the adoption of the principle of using one code throughout the intelligence community. This code, the Intelligence Subject Code (ISC), however, lacks a fundamental unifying logic, and has not been adequate to cope with the many new demands levied upon it. It is difficult, if not impossible, to apply the code consistently and accurately because categories have not been defined properly and given items appear in numerous places without adequate cross referencing.

To make matters worse, the organization and staffing of the document analysis sections lack specialization, balance and adequate procedures for assuring high-level analysis in the various intelligence fields. Furthermore, the search instruction writers also lack specialization, and have not been kept fully informed on the coding decisions which were being made by document analysts. Moreover, their substantive decisions on what categories of data to recall have been made unilaterally, without adequate consultation with the research analyst. As a result of these deficiencies, the really conscientious research analyst, in order to be sure he has all the available information bearing on his problem, should theoretically forego the selectivity of the six-digit code and make broad requests at about a two or three digit level; that is, he should deliberately ignore the capability of the search apparatus and use it like a conventional card file.

Vigorous efforts are now under way to develop a more flexible and better balanced machine search system, of necessity a more costly one, and especially one able to cope with the Limited Immediate Recognition Problem which plagues all indirect access techniques.[6] But there is little point in spending huge sums of money to develop and purchase a high machine search capability if this capability cannot be utilized because of a much lower capability elsewhere in the system, namely, in coding documents or in writing search instructions. Large machine search expenditures are rational only if similar effort is made to get comparable quality in the three sensitive spots involving the concomitant human effort: the code, the coders, and the search instruction writers.

The Code. The main principle to be followed in formulating the master code for indexing document content should be to focus to the greatest extent possible on *general categories of observable data* in a manner which obviates the necessity for the coder to blur the classification process through the introduction of personal assumptions. Within the general categories the code should then go to particular sub-categories and modifiers. (Categories should be defined properly, and given data should be either treated in one place in the code rather than scattered about, or adequately cross referenced.)

The search for any general category of documents should yield, along with its family of sub-categories and modifiers, the documents of the unmodified general category for which specific sub-category identifications could not be made when they entered the system. Under this type of coding, highly selective runs would be made into a particularly relevant sub-category or modifier code for the direct evidence. But by Boolean algebraic manipulation, the research analyst can select from within the general category homogeneous categories of knowns and unknowns which bear indirectly upon a problem concerned with the particular sub-category, and this may result in further

[6] The Minicard system, for example, combines or associates the code form with the photoreduced counterpart document. This system has not been fully tested in intelligence applications, but it appears to offer unusual flexibility in use and to facilitate the interchange of documents and code forms. As regards files, Minicard could provide the country files recommended above and still permit machine search for specifics within that logic.

ILLEGIB

identification of some unmodified general category data. Other portions of the code will have to deal with more abstract categories of data.

Centralized Community Coding. The analysis and coding of incoming documents within CIA is at present carried out in four sections which are organized to specialize on types of documents according to issuing agency and which are staffed by personnel having political science or general education backgrounds. In general, a single person analyzes a given incoming document. The analysis is usually reviewed by one other person, but there is no method for assuring that the implications of the given observable phenomenon are coded completely in all relevant functional specializations. There are no economists, military specialists, and physical scientists to recognize and identify data in these fields.

The coding sections should be regrouped, probably under the general guidance of the IAC Committee on Documentation, to provide both functional and area specialization. It is recommended that groups be organized first by functional specialization, for example a political and social section, an economics section, a military section, a physical science section, and perhaps a geography section. Within functional sections there probably should be area specialization, for example an economist for Bloc economies, one for western European economies, one for non-Bloc Asian economies, etc. Within the military section, other specialties could be introduced, for example, experts able to identify information bearing on Soviet missiles and possible missile sites. Briefings should be arranged on various subject problems, particularly those having high intelligence priority. Finally, estimates and gaps-in-intelligence reports from all major IAC research groups should be routed to and discussed within these sections.

Procedurally, every incoming raw intelligence document should be routed to each functional section for analysis, to assure competent examination for implications in all intelligence aspects. This innovation assumes that current batch handling be replaced by discrete handling of individual incoming documents. Its functional orientation could, and I think should, lead to a centralized and highly sensitive coding for the entire IAC to replace the several duplicative operations which individually have limited competence in some fields. The

coding slots could be staffed jointly by CIA and the IAC community in accordance with assigned primary responsibilities. In any case it would be profitable to have select advisory personnel from IAC agencies assigned to the functional sections on a temporary or rotational basis. All these measures serve to restrict significantly the scope in which the Limited Immediate Recognition Problem operates, but clearly they do not eliminate the problem. And, in view of this recognition problem, the general decisions not to code or to photoreduce certain types of documents—the so-called "NODEX" guides—should be carefully reviewed by community users.

Search Instruction Writing. The central reference service has also underestimated the importance of the search instruction writer. This person, usually a trained librarian but understandably insensitive to the *indirect* evidence which bears on specific research problems, is nevertheless making substantive judgments on each such problem which requires reference material, in that he determines what categories of coded data are relevant to it. If he makes this selection unilaterally, his inexpert substantive determination removes responsibility from the research analyst for further data probes. Present Intellofax procedures call for "another look" if *no* documents are recovered on the basis of the first instructions or if a *known* document is not turned up, but in the more typical cases short of these extremes there is no way of assuring that the instruction writer has ordered all or even most of the categories which the research analyst should study.

There should be a reconsideration of the question whether the formulation of the master code used by the document analyst is really adequate in the search instruction phase. Document analysis is primarily the matching problem, resembling inductive reasoning, of subsuming the document content to the master code. In search instruction writing there is primarily the deductive problem of calculating what data bear upon a given research problem. It is therefore possible that two sets of code books would be more effective, a basic one for document analysis and a cross-referenced one for search instruction. The latter might bring together code categories which usually bear upon certain typical and frequent research problems.

ILLEGIB

Search instruction writers should specialize more than at present and should undergo special training on research methods. Daily current intelligence briefings, as well as reading finished intelligence within their specializations, might be helpful to them. Procedures for keeping them informed of the coding sections' decisions on particular coding problems should receive continuing review. Above all, instruction writers should never make unilateral decisions on what categories of data to search for. The research analyst must be made more familiar with the problems of coding and should participate actively in the formulation of search instructions.

Ideally, for optimum functioning of an indirect access reference system, the research analyst himself should have coded all documents and should write the search instructions for material relevant to his immediate problem. It is only by approaching this ideal more closely, through procedures based on an improved understanding of the formidable communication and comprehension problems involved, that the cost of machine search can be justified. These considerations apply both to Intellofax and to the more complex machine systems under experimental development. (See, for example, footnote 6 above.)

Problems of Political and Military Dynamics. Machine search has its greatest potential value for those documents whose content aspects contain easily defined and recognized logical categories. Economic activities, physical country descriptions (including missile site characteristics), target information, military hard goods, order of battle, biographic information and other broad categories of data can be handled conveniently and with great rapidity by Intellofax or by some other retrospective machine search. (In line with Function II above, machine search can conveniently be extended to include unclassified material relating to selected high priority National Intelligence Objectives.) But these machine systems are inconvenient, if useful at all, for certain other information retrieval requirements.

Especially for political and military dynamics—the delicate tasks of inferring strategies, objectives, and motivations and of identifying and weighing opposing forces—there usually is no substitute for intact chronological files by country and issuing agency. In these pursuits the relevant categories of data are

not fully known, and in addition they can change frequently, perhaps with the demise of a political leader. Moreover, purely economic or purely military data sometimes later acquire critical political meaning, even if only through an implicit threat. Furthermore, there may be very indirect shreds of evidence in the raw documents which suggest new lines of inquiry or which contribute to the testing of hypotheses on the possible strategies of various factions or interests, shreds which seldom can be identified *a priori* for coding purposes but acquire meaning gradually with successive study of preceding and subsequent events. Finally, the machine search system is incomplete; certain types of documents such as FBIS, cables and Weekas are not coded.

In the field of political and military dynamics perhaps more than in others, a further deficiency of the present central reference system is a serious one—delays and gaps in the actual retrieval of documents. If it requires several days or weeks to retrieve or re-enlarge an eight- or ten-month country file, if it requires even two days to furnish prints of a hundred or so documents, if documents received in recent weeks are not made available because they are in photoreduction process, then the area analyst with an immediate need cannot be serviced by machine search, regardless of how well the material may be coded or how wisely the search instructions are written. Intelligence officers with important policy briefing functions simply cannot afford to be kept waiting while the slow, painstaking process of assembling country files takes place. The responsible country analysts must have direct and immediate access to the intact files by country, preferably in hard copy, for which this article pleads.

Supplementary Facilities

The central reference system should be a house of many mansions. It should include, in addition to its reorganized complete file of classified documents, photoreduced and coded for machine search for functional analysts, and its hard-copy file by country of current classified and open-source material for broad political analysts at a country level, a number of supplementary facilities. Some of these are represented in CIA by existing registers and special libraries. For example, the important Industrial Register provides direct access to reports

ILLEGIB

on numerous Bloc industrial installations. There should be added an improved reference assistance service with substantive competence (area and functional), somewhat analogous to the Legislative Reference Service of the Library of Congress; a complete collection, by country, of the speeches and communiques of political leaders; area source registers; a file of FBIS dailies by country of broadcast origin; and arrangements for making revealed US policy positions on a given country available for quick reference. Finally, it is possible that for selected high priority intelligence objectives, selected unclassified material should be coded for the purpose of achieving the rapid all-source objective cited in theoretical Function II above.

Speeches, communiques, and other position papers by major political leaders theoretically are available in central reference, but access to them requires a tedious search of *NY Times*, FBIS dailies, State and CIA reports, and foreign newspapers. These materials are of such usefulness to national intelligence in showing the evolution of political leaders' public positions that special efforts should be made to make complete files by country available within CIA on a moment's notice. This service, involving routine search through relevant incoming source documents plus nominations by substantive area analysts, would result in a file similar to the present Bloc economic plans collection.

Area source registers should maintain a listing of the publications within or relating to each country, with data on the usual subjects covered in each, its orientation, apparent backers, etc. This file can borrow as appropriate from *The Political Handbook of the World* and from Library of Congress reference facilities and publications. Such a device has considerable potential for filling important data gaps, and would be useful in liaison work with other libraries.

FBIS material can be systematically included within the central reference system by a simple, inexpensive device. Existing FBIS regional dailies could be split up into countries to form new reference volumes containing the accumulation of individual country output over some months. Each new reference volume would comprise two parts, the index and the broadcasts, and each part could be set up on a day-to-day chronological basis. In this form, FBIS would parallel the proposed primary document file according to country of origin and

within that by issuing agency. Alternatively it could be bound and indexed as a book, but indexers should have an intelligence orientation.

In short, the central reference system should thus develop a combination of machine search, country files, and other features with a goal of achieving balance and flexibility. The criteria for balance and flexibility are two: the attainment of speeds of reaction which are generally consistent with the intelligence priorities of existing and foreseeable types of projects; and the maintenance of a capability of filling effectively all reasonable requests and needs which are now experienced and those which are likely to have a significant bearing on national intelligence and security within the next five to ten years. Consideration should be given to the problem of simultaneous high priority requests which make use of the same raw intelligence documents, reference personnel, or other capabilities and to the problem of making the entire community's assets available when appropriate to researchers in any of the IAC agencies.

CIA now has primary responsibility for studies looking toward the assignment of more specific and differentiated responsibilities among IAC agencies for maintaining information storage with rapid search and retrieval capabilities. It must take the lead in developing a master system to integrate the compatible assigned capabilities of other IAC agencies, as well as those of the Library of Congress and other special collections, as chambers of the federal intelligence Memory. Especial emphasis should be given to the provision and placement of information handling capabilities—realistically conceived in the perspective of the data and intellectual processes involved—to facilitate the analysis and weighing of factors which tend to upset political equilibria in countries of the Free World or to alter the strategic balance in the world situation. These capabilities certainly should have the highest information handling priorities in the intelligence community.

This review has been very critical in tone. The underlying point, however, is not that there are better reference systems elsewhere, that the existing facilities are not of considerable value, or that no progress has been made in the past few years. Rather, the point is that the international situation is moving

ILLEGIB

into a subtle phase in which the time required to recognize new strategic and tactical developments and assess their implications will become increasingly important. The existing reference facilities are not yet good enough to meet this need.

In this third article of its series, Air Targets solves for the most elementary unknown in its threat-vulnerability equations.

DEVELOPMENTS IN AIR TARGETING: THE DAMAGE ASSESSMENT MODEL

Davis B. McCarn

The primary mission of air targeting is the identification of opportunities for air action. The identification of these opportunities requires an exhaustive study of many aspects of the structure of potential enemy nations. Each of the important resources of these nations must be evaluated, measured, and, if possible, associated with specific geographic locations. The contributions of these resources to the strengths of the enemy must be evaluated. The motivations and national objectives of the enemy must, in turn, be studied to determine the probable threats posed by his available strengths. Having defined the threats posed, it is then possible to return to the resources which were critical to the strengths underlying these threats and assess their vulnerability to air attack. Through the assessment of the vulnerability of many combinations of resources, opportunities for optimum air action can be identified. This analytic process, proceeding from the enemy's resources and strengths to the threats he poses and from his vulnerabilities to the opportunities they provide for air action, is what air targeting calls "comprehensive analysis."

The analytic model described in a previous issue, the Military Resources Model,[1] can be thought of primarily as an aid in the analysis of resources to determine strengths. The Air Battle Model, also described previously,[2] and the Damage Assessment Model, considered here, are primarily concerned with the measurement of threats and the assessment of vulnerability. Since an enemy threat can best be measured in terms of our vulnerability to it, both of these elements reduce essentially to measurements of vulnerability.

[1] *Studies in Intelligence*, Vol. 2 No. 1, Winter 1958, pp. 51–64.

[2] *Ibid.*, Vol. 2 No. 2, Spring 1958, pp. 13–32.

Vulnerability in this sense covers a wide range. In particular, it includes by inversion the time-phased capabilities of the two (or more) antagonists *in relation to each other*. The purpose of the Air Battle Model is to keep under calculation the interacting and fluctuating capabilities related to the progress of an air war. It disregards other capabilities, military, social, and economic, which do not affect the progress of the air battle. Determining the vulnerability of these remaining capabilities and strengths requires additional analysis. Basic to both the Air Battle Model and this analysis of other capabilities is an ability to predict the effects of weapons and weapon systems used by the opposing forces. The Damage Assessment Model has been developed to meet this requirement.

The Theory of Damage Assessment

"Damage assessment" as used here is limited to mean prediction of the probable effects of hypothetical applications of atomic weapons or weapon systems to specific targets or target systems. The Model is simply a body of analytic procedures which have been standardized to the point where they can either be manipulated even by people who don't understand them or fed into high-speed computers. The Damage Assessment Model is a growing body of highly flexible analytic procedures, capable of utilizing rapidly changing data with regard to atomic explosions in predicting the probable physical, functional, or operational effects of atomic weapons on targets or target systems.

In a relatively simple example, the Damage Assessment Model predicts the effects of attack on a specific airfield with an atomic weapon of given yield which is burst at a particular height. This prediction is usually in straightforward terms of physical effect, such as probable fraction of aircraft rendered inoperative, probable fraction of hangars collapsed, or residual contamination in the maintenance area after four hours. Interpretations of these physical effects may be computed, however. In this simple case, the calculation of contamination intensities, blast damage, and thermal and initial gamma radiation fluxes may be combined with intelligence or assumptions about personnel distributions and shielding to produce injury and fatality estimates. More complex cases involve functional or operational interpretations of physical effects. These interpretations are important, but the basic building block for all damage assessment is the capability to predict the probable *physical effects* on targets of a projected attack.

George F. Kennan has written in a recent article in *Harpers Magazine*, "I do not believe there is any human mind or group of human minds or any calculating machine anywhere in the world which can predict with accuracy what would happen if these weapons should begin to be used. . . ." His proposition as stated is undoubtedly right. Prediction of the total effect of atomic attacks is an overwhelmingly difficult problem. Probably the most difficult part of it is the assessment of human reactions, like for example that of the doctor at Hiroshima who painted severe burns with iodine. Most of the available evidence indicates that people cannot be trained to accept catastrophe.

Even with the more limited problem of predicting the specific physical effects of atomic attack, it is not evident what physical effects should be selected for prediction. Any damage prediction presumes a prediction of the occurrence or non-occurrence of some selected type of damage. The questions asked must be of the type "Did the building collapse?" not of the type "What happened?" Determining what questions to ask is itself an abstract question requiring careful analysis.

These two aspects of the total problem, the assessment of human reactions and the selection of the physical or other effects to be predicted, are both under continuing investigation. The purpose of this article is to describe only the first step in the solution, the development of a capability to predict specific selected physical effects. This capability, which now exists in the Damage Assessment Model, has considerable importance in its own right, without regard to the solution of the larger problems. There are many problems requiring only comparative accuracy which are susceptible of solution with such a model. Questions about the advisability of using alternative weapon systems or strategies can be attacked through the computation of even arbitrarily selected physical effects to show the relative advantages of each with respect to these effects. And while prediction of the total effect of atomic attack is not possible, it is certainly possible to develop techniques for indicating the order of magnitude of some of the effects.

The Operation of the Model

The Damage Assessment Model can be divided conceptually into two parts, the first for assessing the direct effects of atomic weapons—blast, thermal radiation, and initial gamma radiation—and the second for estimating residual contamination or fallout. Of the direct effects, attention has been focused primarily on blast, and the procedures for calculating blast damage are here described in greatest detail.

The conceptual framework for the assessment of blast effects was developed from analysis of the damage at Hiroshima and Nagasaki. Analysis of these data indicated that any system for predicting blast damage must take into account the rather awkward fact that many structures near the bomb-burst survived while structures of similar construction farther away were damaged. If a weapon were burst over an extensive housing development of uniform construction, the result might be pictured as in Figure 1. In this figure each black square indicates a building that collapsed, and each white square one that did not. It will be noted that there is no sharp line between those collapsed and those left standing.

Figure 2 shows a plot of the data on one type of structure at Hiroshima and Nagasaki. The curve shown is a statistical best fit to the data; it associates with each distance a probability of occurrence for a particular type of damage. Statistical analysis of a series of such fits to data on Hiroshima and Nagasaki indicated that the probability functions for all of the various categories of structures in these two cities were remarkably similar.

If a series of these similar probability curves is drawn successively along the distance axis of Figure 2, each such curve, identified by its mean distance, can be thought of as representing a vulnerability class. These classes were assigned vulnerability numbers, VN's, and through weapons effects tests the distance range of each was translated into an equivalent range of overpressures. The VN classes thus define the probability associated with any distance or overpressure. The obvious question with regard to this last sentence is, probability of what? The answer is probability of any kind of damage, since the scale itself is a general one unrelated to any specific damage effects.

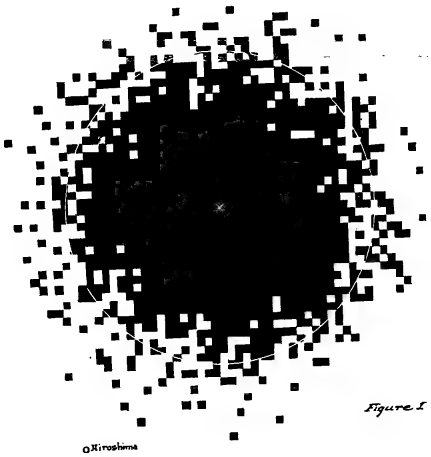


Figure 1

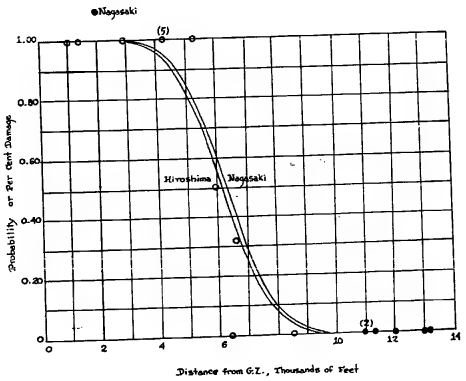


Figure 2

Given a particular kind of damage, however, the overpressure associated with 50 percent probability of the occurrence of that damage can be estimated, and the probability of that damage at other overpressures can be estimated, by selecting the appropriate VN. In addition, the extensive data available from atomic tests can be used to predict the overpressure at particular distances over a wide range of weapon yields and heights of burst. Thus the assignment of a VN class to a target to define the probability of some particular type of damage allows the prediction of this probability for any weapon yield or height of burst. The selection of VN's for a variety of kinds of damage on many different types of structures and targets has been accomplished on the basis of data from the Japanese experience, atomic test data, and theoretical calculations.

The handling of thermal and gamma radiation is done with probability functions similar to those used in blast analysis. The system thus allows the prediction of any type of damage. Pre-analysis is required to determine, on the basis of the vulnerability of the target and the type of damage to be predicted, which vulnerability classification is appropriate. The model then provides for estimating the probability of this type of damage.

The technique used in estimating residual contamination is basically different from that used in the analysis of direct effects. Whereas the analysis of direct effects is based on a probability curve and results in a statement about the probability of some type of damage to a particular target, the contamination assessment model produces definite answers about absolute intensities or doses. This difference does not arise from any predictability of fallout as opposed to unpredictability of direct effects. On the contrary, it results from the difficulty of constructing a probability model of fallout; analytic effort has not succeeded in developing a probability model of fallout patterns, which depend upon unpredictable weather conditions among other factors.

Contamination analysis, however, is usually applied only to large target systems, where accuracy with respect to individual targets is less important than average estimates for the whole system. The Model allows the computation of estimated contamination levels based on a stylized contamination pattern, given the assumed weather conditions at the time of the burst,

the location of the burst, and the type and yield of the weapon. The Model provides for estimating intensities or doses at any time after the initiation of hostilities.

It may be noted that the definition of this Model does not require that it be available on a computer. The description of its two parts, one for direct effects and one for contamination assessment, is applicable to either a hand or a computerized model. The Model is available in either form. Numerous technical manuals have been prepared describing the use of these procedures in hand analysis. Programs have also been developed for several computers, mechanizing the preparation of damage assessments by the Model. The requirement for a computer program is evident from the magnitude of present targeting problems. In one recent study, roughly 1,000 high-yield weapons were gamed against a system of 40,000 targets and target areas. Thirteen hours of computer time were required to produce twelve damage answers on each target or target area, a total of nearly 500,000 predictions. A problem of this size is well beyond the capabilities of hand analysis.

The Damage Assessment Model herein described is only one of several such models which have been developed to serve this purpose. The development of a single, standardized damage assessment model is now being actively pursued in the Department of Defense. It is expected, however, that such a standardized model will adhere quite closely to the concepts illustrated in this article.

An analysis of the personal tensions which may beset an intelligence officer under official cover and lacking full contact with his intelligence organization.

PSYCHOLOGICAL PROBLEMS IN SINGLETON COVER ASSIGNMENTS

Martin L. Shatz

People in the intelligence business have long recognized the problem of the psychological tensions sometimes experienced by a singleton intelligence officer. In the case of the singleton who conducts covert operations from the official cover of an overseas organization, these are not infrequently so severe as to include among their manifestations an evident unproductiveness from the intelligence point of view. The man is judged by his operational supervisors to have produced less than his capabilities and cover potential would have led them to expect. He may become so involved in his cover position that he seems to have neither time nor inclination to carry out his intelligence duties. This paper seeks to identify the sources of some of these tensions.

It is evident that one of the singleton's difficulties lies in the constriction of his opportunities to communicate with other intelligence personnel: his cover is likely to isolate him to the extent that his motivation is impaired by his inability to discuss his covert activities with the base out of which he operates. What is less evident is the difficulty of psychological tensions generated by his attempt to maintain a satisfactory relationship with the members of the cover group with whom he lives and works, who may or may not have knowledge of his covert status.

There are certain psychological needs which most of us develop, in varying degrees, by virtue of the very fact that we have been reared in the American culture. Some of these have been presented in non-technical language in recent books on the subject of the American social character, for example in William A. Whyte's *The Organization Man.* The three such needs pertinent to the problem of this article are in simplified summary the following:

[redacted]

As we grow up we develop specific satisfactions from being members of groups which are important to us or which we find in some way attractive. These can be formal or informal groups. Conversely, we feel concern if we are excluded from such groups. Psychologists call the need for these satisfactions "belongingness needs."

We also learn to want and enjoy the respect and recognition of others for a variety of reasons, whether for pure ability, wealth, family background, or some other superiority. This is sometimes referred to as "status need."

We set up certain standards for ourselves which we attempt to maintain; and we also set up certain goals which we strive to achieve. These are called "achievement needs."

It must not be assumed that the individual is always conscious of these needs. Indeed, at times he may be completely unaware that they are influencing his actions in a given situation. But the frustration of these needs, conscious or subconscious, is likely to produce considerable psychological tension in any person.

This frustration is not likely to occur among intelligence officers at a field station where a number of them are clustered together under the same kind of cover. Here, as at home, they are all members of a structured organization, each with his role and function as a part of the team. In addition they are generally members of the social groups which are formed from station personnel. The station organization also provides the intelligence officer the opportunity to develop his professional skills and his career under the direct observation of his operational supervisors. He can work with confidence toward promotion and other goals which he has set up for himself.

To return, however, to the singleton under official cover and his problem of unproductiveness and overinvolvement in cover activities: what are some of the influences operating on him? For one thing he may find his new cover role very pleasant. If he has been a covert employee for a number of years, without an overt employment role which relates him to the outside world, he may now find it most refreshing to be able to act as representative of a respected organization and deal comfortably with outsiders, especially the local population of the country

in which he is stationed. A more basic reason for this overinvolvement, however, this "vice consulitis," as it is sometimes called, is the closure of other avenues for satisfying his need to be accepted as a member of a group and to be respected for his performance as one of the players on a team.

It is true that he could develop personal and social relationships with his colleagues of the cover organization without throwing himself into their work, and that these should satisfy in part his need for association with a group; but the respect he receives from them will be determined not so much by personal relationships as by his ability to perform his cover duties. If he is a person with a strong psychological need for recognition of his status or achievements and if he has received this kind of recognition in the past within his own organization, he will probably devote to his cover duties whatever time and effort is necessary to achieve a like status and recognition with the cover organization, even to the extent of slighting his intelligence assignment. Such a person finds it difficult to resign himself to playing a weak or undistinguished role among his colleagues in the group with which he is immediately associated.

Even in the social groups formed from the cover organization, moreover, he may find his intelligence duties an obstacle to his and his family's acceptance as full members. These duties may require him to work evenings or to be away frequently on trips and thus may inhibit his regular participation in the rather full social life of some overseas organizations. Informal pressures may be exerted on him to conform with the normal obligations of this social life and as a result neglect certain operational activities. If his colleagues do not know about his intelligence duties, there is the additional complication of finding credible excuses and explanations.

Fortunately, some of these problems are usually obviated by informing at least part of the cover organization's staff that the intelligence officer has a special assignment in addition to his regular duties, and his colleagues often come to recognize the necessity for his irregular pattern of action. This understanding eases his social and office relationships, but by no means fulfills his need for real membership in the group and a satisfying function in the organization. He is still likely to strive, at least subconsciously, to achieve recognition in his

cover role and so devote more time and energy to it than is required to maintain the cover.

Socially, his colleagues' awareness of the nature of his other activities may be a further barrier to his, and more distressingly his wife's, being accepted as a member of the group. Many such groups have standards which reject intelligence operations as unethical activities which are in conflict with democratic and diplomatic principles. Their members, not knowing precisely what the intelligence officer is doing, imagine the worst and fear the worst, contemplating their own dreadful embarrassment if he should be exposed. The men may be antagonistic, suspecting that the intelligence officer is working at cross purposes or in competition with their own objectives. The women may make slighting comments about "people who pretend to be doing something they aren't."

If in these circumstances his contacts with other intelligence personnel and his own organization are too tenuous to compensate for exclusion from his cover group, and if he finds the cover group an attractive one, he may be forced subconsciously to accept its standards and conform to its expectations of a member. He may come to share their disapproval of illegal operations and have fear for their embarrassment—and his banishment from the group—if he should be exposed. These attitudes will of course affect unfavorably his approach to intelligence activities.

It is not implied that most, or even many, officers under lone cover become thus alienated from their intelligence mission. The point is that these unfulfilled needs are productive of unhealthy tensions in many, perhaps most, such singleton operators, tensions which act on them the more acutely in proportion to their dedication to their intelligence careers. The dedicated officer strives to maintain and improve his standing in the intelligence organization, his professional skills, and his operational production; but he does not realize how dependent he has been on the constant flow of expressed or silent approbation from his peers and supervisors until it has been choked to a trickle in infrequent meetings and messages. Even if the trickle is predominantly favorable, it may still be much less than what he is used to; and any disapprovals or divergent views, expressed or implied, are likely to become magnified in the absence of opportunity for him to present his case.

The flow of information about what's going on in the parent organization has also been choked to a trickle, information about operations and information about organizational developments. It may be difficult for him to maintain an intensive interest in operations if all his current knowledge about them has to be derived from those few he is himself conducting. And it will seem to him that his planning for his own future beyond this assignment is being done in a vacuum, out of touch with the organization.

Finally, he may suffer from tensions arising from the very multiplicity of his roles. If, for instance, he is handling four compartmentalized cases and using a different alias and cover story with each, while at the same time performing his duties as a member of the cover outfit and maintaining covert contact with his intelligence organization, he may feel himself in an unreal world which does not often permit him to be himself. The intelligence officer assigned to a station lives in a world of reality for intelligence officers; he can discuss his multiple roles and cases with other operational people and share their experiences. The singleton is cut off from this world of reality.

This article has been designed to point out and analyze a problem rather than offer a solution to it; but some of the avenues along which the solution lies can be suggested in conclusion. First, by careful selection and assessment, the most suitable type of individual for the difficult singleton assignment can be separated from those who may be predisposed to overinvolvement in cover activities. If the man chosen is an "odd ball" by headquarters standards or in terms of Washington society, that does not matter so long as he is otherwise competent and will be able to derive satisfaction from his work in the singleton status. Second, supervision and guidance prior to and during the assignment can help keep the singleton's cover activities in perspective with his intelligence mission. If he likes, trusts, and respects the man who is his link with the intelligence organization the risk that these problems will arise is minimized. Third, the singleton's wife, who in some instances has a worse problem than her husband, should whenever possible be taken in and treated as a partner in the operation from its inception; and she should be psychologically supported and backstopped by women of the intelligence organization within the limits of security and feasibility.

This and the following article debate a radical solution to the problem of deinsulating intelligence officers abroad from the cultures they are sent to penetrate.

KIM OR MAJOR NORTH?

W. A. Tidwell

It is primarily through overseas intelligence activities that official Washington reaches out to seek an understanding of other countries and tries to meet their people on their home ground in their own cultural environment. The intelligence community is not only responsible for knowing what the people of other cultures think, but for knowing how they think and why, and for doing something about it when it is in the US national interest to influence their thinking and actions. Discharging this responsibility requires overseas personnel who have analytic, reporting, or operational ability, language skills, and the ability to live with people whose culture is radically different from the American culture.

The need for all but one of these skills is well recognized, and with much effort we are making progress toward acquiring them. The requirement for ability to live in a foreign culture, however, is not so widely understood, and we have made little progress toward acquiring it.

The American culture is in some respects an Electrolux and Old Granddad culture. We are most at ease when surrounded with the familiar and convenient amenities of American civilization. As a result, when Americans go overseas they usually try to take the material aspects of their culture with them wherever they go. In many cases they are amazingly successful—so successful that their two-year tour abroad is spent shopping at the local supermarket, watching the latest Hollywood product, and reading Mickey Spillane; and they come into contact with the local population only as they must make use of servants, cab drivers, and waiters from among the "natives."

In another respect the American culture could be called a Good Old Joe culture. We want to be open and friendly. If we meet people who do not understand or respond to this attitude we tend to avoid them and seek associates who do. The path of least resistance abroad is to associate only with other people who are trying to be Good Joes, and by and large these will be other Americans. This natural gravitation toward our own kind reinforces the tendency to form isolated colonies and makes it doubly hard for us to meet, know and understand foreigners.

For all the hue and cry about the breaking up of homes and neglect of children the American culture is one oriented toward family life. The population statistics reveal at least one result of this preoccupation with family. Most American men in the twenty or thirty most active years of their lives are centering their energies on home-making and often are devoting a large portion of their time to household chores and child-raising. This speaks well for the vitality of the Americans as a people, but it leaves little time and no incentive for learning to live in an alien culture.

We have read a lot recently about the drive for conformity dominating American culture. There are lots of good reasons why this tendency should exist; after all, we are still assimilating many varied elements into our race and culture. But this tendency can lead us to neglect and even reject any understanding of people who do not conform to our way of life.

In addition to these natural cultural barriers, we in CIA have created a number of artificial obstacles which make it difficult for a man to live inside another culture even if he should overcome the natural barriers and make a serious effort in that direction. One could say that these obstacles are a result of the headquarters orientation of our organization and its personnel policies. We discourage association with aliens and practically prohibit marriage to them. We require conformity to American moral standards, social mores, and conventionalities of behavior in those who hold or seek key positions in Washington. The practice of rotation to headquarters and the greater opportunities of a Washington career combine to enforce these standards and conventions upon overseas personnel as well. These policies prevent our developing men who

can live inside a foreign culture. Worse, they drive away men who do want to live inside a foreign culture and attract those primarily concerned with success in the headquarters milieu.

All of these obstacles, natural or of our own making, create serious operational problems for us. It is natural for an intelligence organization to depend heavily on foreigners in its work, but our situation forces American intelligence to depend on foreigners much more and at an earlier point in the process than is desirable. It forces us to use those foreigners who are best educated and most westernized to do our own job; and these people are poor points of entry into a culture, being themselves at least partially withdrawn from it. Furthermore, our relative unfamiliarity with foreign cultures makes it hard for us to get a true reading of the people we are so using. It is hard for us to judge their reliability and motives, and hard for us to guide them in their operations, because we know so little about the context in which they must operate. In some cases we even use foreigners against third countries. This device may have virtues, but it means that we are trying to see through two cultural barriers instead of one.

The Communists do not have the difficulties in crossing cultural barriers that we do. Through their emphasis on the subordination of national, racial, and cultural differences to an international cause, the Soviets have at their disposal intelligent and trained Communists who are at home not only in West European cultures but in the Burmese, or Javanese, or Arab and can bring the Soviet influence to bear on great numbers of backward and unwesternized people throughout the world. These Communists are our strongest competition. They are the people that we must beat, and we cannot beat them from the desks of an embassy office or a consulate compound.

It is not an easy job to find people with the brains and personal skill necessary to do an intelligence job inside an alien culture who will make the effort and endure the discomfort involved. Even in the comfortable and insulated communities abroad through which we now operate, Americans and their families must go to a great deal of trouble and suffer illness and other discomfort to work overseas. What can we do to get intelligence officers to dig deeper into the world abroad?

For one thing, the hard core of the overseas service might consist of men unburdened with family ties. It is true that if a woman is willing to make the effort she can be a great help to a man in getting to know people and aspects of foreign cultures that he might not get to know on his own, particularly in those western cultures where women are relatively emancipated. Very few American women abroad, however, have an ambition to serve in this way. Families can therefore accompany without detriment only those overseas officers who have no real need to get to know the country they live in intimately, or those few whose wives are found to have the skill and interest necessary to make the same sort of movement across the cultural barrier that we want their husbands to make. These wives should be subject to the same recruitment and training process as their husbands. The active nucleus of an overseas station should be made up of bachelors or men in a position to act like bachelors, having the freedom to move deep into the local culture and to spend most of their time in contact with the local people.

For another thing, we might encourage the development of career patterns oriented primarily toward a particular foreign area or culture. Overseas officers could be selected from personnel whose ambition is not to become a division or office chief, but to enjoy success, power, and prestige in the area or culture selected for them. They should be encouraged to "go native," devoting their energies to making a place for themselves in this culture, not burying themselves in the routine of the local American business or diplomatic community. Problems of cover would be complicated, but these problems would not be unsoluble, and the gain would be worth the extra effort.

The activities of these overseas officers should be evaluated upon their effectiveness, which will in large measure be a function of the position they carve for themselves in the local milieu, and they should not be expected to conform to American social standards and conventions. They should, it is true, be expected to maintain an objectivity of view in spite of their prolonged adoption of another culture, but a man who bridges two cultures is more likely to be objective than one who has never got outside the American way. The danger that an officer so thoroughly assimilated may develop greater sympathy and loyalty toward his adopted society than his native country

can be forestalled by periods of leave in the United States and a system of rewards and incentives, and in extreme cases can be disposed of by modern security check techniques.

What system of rewards and incentives would attract intelligence officers to surrender for long periods their status and aspirations in American society in exchange for the dangers and discomforts of an unfamiliar one? The standard incentive is money; yet money is for spending, and spending abroad leads to the conspicuous consumption which is one of an American's greatest obstacles to crossing the cultural barrier. The assimilated intelligence officer should have access to good medical service, but no other material support which would tend to differentiate and separate him from the people with whom he must live.

The problem could be met in part by providing the major monetary reward in the form of a bonus to be collected after a fixed period of satisfactory service. The amount of the bonus might be raised considerably for each additional fixed period of satisfactory service. This would prevent the development of conspicuous consumption, but would hold an ever larger carrot before the man's nose.

Another incentive could be provided in the form of a radical change of pace. Most people can endure hardship much better if they know that at some point they will be relieved of it. These overseas officers could be rewarded with a year's vacation with pay in the United States for say every five years spent in Aden or Meshed; and this year would at the same time serve to prevent their becoming too un-Americanized at heart.

The best way to attract people with drive, however, is to provide prestige and recognition for them. At home this reward in the profession of intelligence has to be confined to a narrow circle, but intelligence officers who achieve success in another culture have by virtue of their very duties acquired prestige and recognition inside the culture they have penetrated. This prestige abroad could be augmented by the Agency in various ways tailored to each individual case. Many men would rather have fame and power among the Sikhs than obscurity in Foggy Bottom.

Aside from the concrete intelligence yield from better cultural penetration, American prestige and influence in general

might rise drastically in many parts of the world if inside each important culture we had well-known Americans who, although obviously foreign, conformed to and participated in the customs and practices of that culture.

It is a hard job to take on a completely new way of life, but intelligence personnel have to undertake many a hard job; they can do whatever is necessary to accomplish this too. Life in any culture is really a question of learning the appropriate techniques. The techniques of staying alive and healthy in a neolithic culture are probably no more complicated than the techniques we use every day; they are only different.

Probably the key element in this problem, however, is the image of what we want to be that we carry in our minds. Being Americans, we carry first of all the image of the successful American. It may have many forms, but they are all American forms. Next, being in the profession of intelligence, we have an image of what an American intelligence officer should be. This is an image not yet fully matured, because we are still internes at the profession. The chances are that at the present stage of development this image is closer to that American superboy of fiction, Major North, than it is to Kipling's Kim. Let us be careful that as we develop this image we make it that of a brave and energetic man who can move freely in non-American society. Let us not make it the image of an expatriate bureaucrat.

NEW ANACHRONISM

Ralph Riposte

There can be no quarrel with the charge in the foregoing article that Americans generally, and some intelligence personnel as well, tend to transport their homes abroad along with their baggage, consort with other Americans to the near exclusion of foreigners, attend Hollywood films in Bond Bros. suits, etc. Nor can there be any doubt that the insularity of some intelligence officers creates grave disadvantages. Mr. Tidwell's proposals, however, carry within them problems quite as grave as those he seeks to solve.

First, it must be assumed that the writer is speaking of staff employees rather than contract personnel. The "outside man" under unofficial cover is in many places abroad close to the local population. If the article's admonitions are intended for him, they will have for him none of the stimulus of a new idea. Personnel under official cover, on the other hand, cannot follow a pattern of conduct conspicuously different from that of their colleagues in the cover organization without attracting the attention not only of those colleagues but of local services as well.

The basic objection to admonishing all our people abroad, or as many as possible, to adopt any one line of conduct is that the admonition is Procrustean. Our intelligence officers are individuals. Our task is to see that each man knows his strengths and weaknesses and, both for the organization's sake and his own, exploits the former and guards against the latter. The question, "How should intelligence officers act?" is wrong *per se*. The right question is, "How should *this* officer act?"

The Richard Halliburton type of intelligence officer became obsolescent before World War I and obsolete thereafter because this century has witnessed a marked increase in the sophistication and skill of counterintelligence in many nations. It is no longer possible, with the aid of Max Factor's makeup kit and a soiled burnoose, to slip shadow-like among the Arabs and ferret out their plots. The cop wants to see the ID Card; and if it isn't backstopped—as it won't be unless the purpose of the

deception has been defeated at the outset—then our hero's troubles are even blacker. The only way in which we can learn about Arab plots today is to ask Arabs.

In some areas the appeal of Americans is their Americanism. For years after the war—and perhaps even now—Germans, for example, viewed with a narrow eye those Americans who spoke their tongue too glibly and followed their conventions too automatically. They suspected such Americans of being Jews who had fled Germany in the thirties and returned to employ official power for personal revenge and benefit. Most people, even citizens of rather hostile governments, like and are willing to help the foreigner whose efforts to learn their language and history are as sincere as they are naive. But this pleasant atmosphere may vanish if the American is suspiciously sophisticated. Here too, the point is not that some foreigners will not be deeply impressed by a sophisticated assimilation of their culture. The point is that a uniform mode of conduct would be wrong in concept not only because intelligence officers are individuals but also because potential agents are individuals.

The security risks intrinsic in Mr. Tidwell's recommended behavior-pattern are precisely those which are likeliest to remain invisible to the devil-may-care, bash-on-regardless hero most apt to act upon the recommendation. A study of the provocation techniques employed against us in Hungary and elsewhere makes it plain that the disadvantage of an English-Russian dictionary with curves is that she is very likely to be a Russian-English dictionary as well. Of course it may be very useful for an intelligence officer to establish intimacy with a foreign woman. But before he does so, he not only name-traces her but also submits his operational plan for approval. However wide-spread his contacts should be, they must remain thoroughly discriminate. The officer who followed whole-heartedly the spirit of Mr. Tidwell's advice would probably find himself well tiddled. He would not only lose the cover over him; he'd also find nothing between him and the cold, cold ground but one thin native girl.

The intelligence community's response to the mushroom growth of Soviet technical literature is impressive in its coordination and thoroughness.

THE EXPLOITATION OF RUSSIAN SCIENTIFIC LITERATURE FOR INTELLIGENCE PURPOSES

J. J. Bagnall

Russian scientific literature has been an object of the intelligence community's attention for the past ten years and more. Even before the end of World War II, US intelligence had assigned some priority to the examination of Soviet documents. Army intelligence had established its Special Documents Section to collect information on the USSR from captured documents in both the Russian and German languages. Although not abundant in these sources, a good deal of information on Soviet military technical developments was ferreted out. The Washington Document Center, jointly operated by the Army and Navy, similarly searched captured Japanese documents for Russian scientific and technical developments.

Development of the Program

As the examination of captured documents passed its peak of usefulness, when it no longer filled the need for information on current scientific developments in the USSR, the CIA components which had taken over this wartime activity turned to current Soviet scientific and technical literature. They did not find such a wealth of information as has now become available, but still a surprising amount on scientific research in progress, if virtually nothing on its technical application. As the number of journals was small and procurement rather erratic because of Soviet censorship, it was decided to abstract all articles and then translate in full certain ones needed by the community. This procedure, begun in August 1947, continued for almost nine years to April 1956.

Between 1952 and 1954 the Soviets began to release more scientific literature; whereas in 1952 only 87 journals were

available, by 1954 there were 165. The Air Force, taking note of this and desiring to have as much of the literature abstracted as possible, set up with CIA a joint program for abstracting cover-to-cover 58 selected journals of prime intelligence interest. This program also continued until April 1956.

By this time the number of scientific journals released by the Soviet Union had increased to 328, and the intelligence community took a closer and harder look at the increasing amount of material available. Information was beginning to appear on Soviet research and development in, or related to, the fields of atomic energy, guided missiles, electronics, automation and ABC warfare. There were now far more than 58 journals of prime interest. There was no question of the value of the information to intelligence; the problem was how best to handle it in order to serve the varying needs and analytical facilities of the several agencies.

Two separate methods evolved. The Air Force felt a compelling need to continue and expand a cover-to-cover abstracting program, and therefore proceeded on its own to increase the abstracts coverage gradually, more than doubling the number of journals regarded as of major departmental interest.

Other members of the community, lacking the facilities to sort and maintain files for tens of thousands of abstract cards per year, wanted a screening process performed. Accordingly, in April 1956, CIA began issuing twice a month, as a service of common concern, a digest of information. This sizable report sought to cover the entire range of Soviet Bloc scientific literature, sifting out all research reports of high intelligence priority and also providing news-type items about personnel, organizations and activities in all scientific fields.

Although these efforts have focused on scientific journals as the best source of current information, books have not been overlooked. In 1953 the Air Force began the abstracting of Russian scientific books received in the Library of Congress and continues this program today.

The Current Effort

The foregoing historical sketch has traced the growth of interest and activity on the part of US intelligence in the exploitation of Soviet scientific literature, providing a background for correction of the misleading and erroneous publicity in the

US press on the subject following the advent of Sputnik. How does the picture look today, and how is intelligence being provided with information from this source?

Russian literature of scientific interest is available today in approximately 325 journals specifically devoted to scientific fields, another 75 partially occupied with items of scientific concern, and about 80 additional periodicals of a bibliographic nature in the scientific and technical fields. Of books and monographs there are approximately 3,000 per year available. In addition, two newspapers devote regular coverage to fields of science and technology.

The Air Force is abstracting all articles in 137 of the journals. These abstracts are issued in card form and disseminated to the intelligence community. The Air Force also prepares reviews of books received and available in the Library of Congress. Meanwhile, CIA is producing two digests in the scientific field. One, entitled *Scientific Information Report*, has the objective of providing condensed information, whether in summary, extract or abstract form, on subjects of highest priority interest to intelligence. This report, issued twice monthly, is the product of a complete screening of all Soviet scientific periodicals. The other CIA digest is a compilation of items on International Geophysical Year activities. Because of the sensitivity of intelligence interest in IGY information, the report is issued under Commerce Department cover.

These operations carried on within the intelligence community are specifically designed to serve intelligence purposes. However, some activities not so designed, and carried on outside the intelligence community, also produce information which can serve intelligence needs. The intelligence operations described above were therefore developed with cognizance of these others and with a view to making maximum use of them and avoiding duplication.

For bibliographic and indexing service there is first the Library of Congress' *Monthly Index of Russian Accessions* (MIRA). This publication gives the titles of all articles and books received. It is the bibliographic guide to all Soviet literature, including scientific and technical items. In addition, two other libraries—the National Library of Medicine and the Agriculture Library—issue bibliographies which include the

Russian literature in their respective fields; they overlap with the MIRA listings. All three publications are widely available.

There are also several specialized indexes. One in the Agriculture Department Library covers the field of veterinary medicine. This is in card files and not disseminated. Another, in CIA, indexes in card-file form information from Soviet literature on scientific institutions in the USSR. In addition, the abstracting services cited below usually provide indexes to the literature they have abstracted.

Abstracting is the most popular approach to scientific literature, and there are numerous professional abstracting societies. Among the best known are Chemical Abstracts, Excerpta Medica and Biological Abstracts. These professional organizations publish abstracts each in its own field, usually with a lag of six to eighteen months from the publication date of the original source material. In addition, the Joint Publications Research Service has begun issuing translations of the abstracts produced by the Soviets themselves and published in their abstract journal *Referativnyy Zhurnal*. These are abstracts of their own literature. The three series being translated are chemistry, physics and biology.

With respect to translation, a rather extensive program of cover-to-cover translation covering some 30 to 40 journals is sponsored by the National Science Foundation and the National Institutes of Health, and this is supplemented by work undertaken by commercial translating agencies. Translation of specific articles is sponsored by a wide range of agencies and organizations, and a complete monthly listing is issued by CIA in its *Consolidated Translation Survey*.

In summary, now, what does intelligence have as a result of this program? First, it has a complete listing and index of the titles of all Soviet books and journal articles received in this country. Second, it has a digest of all journal information on research related to the high priority objectives of atomic energy, guided missiles, ABC warfare and electronics, as well as all news about Soviet scientific organizations, personalities and activities. Third, it has a review of each book or monograph on a scientific or technical subject. Fourth, it has rather prompt abstracts of all articles in the most important journals. Fifth, it has abstracts excellently prepared by the

Soviets themselves on their own research in the fields of chemistry, biology, and physics. Sixth, it has a fairly large volume of translations of individual articles selected on the basis of particular interest. At longer range there are available abstracts prepared by the professional societies in their subject fields, as well as cover-to-cover journal translations and collations of material in special subject categories.

Intelligence then has available for analysis and evaluation a broad selection of the important information on Soviet science obtainable from the literature. It does not, of course, have an abstract of every article nor a translation of every article. But that is hardly necessary or even advisable. Translating every piece of scientific literature put out by the USSR would fill an estimated 1,500,000 pages per year at a cost of over six million dollars, provided a sufficient number of linguists could be found to do the job. The analytic handling of such an indiscriminate mass of material would be next to impossible.

What we need and what we now have is a good alerting and screening mechanism for the exploitation of Russian scientific literature. This does not mean that every little kink has been worked out of the system nor that the intelligence community will sit back in complacency. At the moment, for example, investigations are being conducted on the feasibility of obtaining data on the guided missile industry in the Soviet Union by collation of fragmentary bits of information scattered through the literature in not obviously related fields. In its coordinated attack on these problems, the community will continue to monitor, through its interdepartmental Committee on Exploitation of Foreign Language Publications, changes in Soviet practices in releasing information through open literature, indeed trying to anticipate them, and accordingly will take joint action to revise as necessary the system of exploitation or its procedures.

The recalcitrant subject of an intelligence interrogation must be "broken" but broken for use like a riding horse, not smashed in the search for a single golden egg.

THE INTERROGATION OF SUSPECTS UNDER ARREST

Don Compos

Your virtuous interrogator, like the virtuoso in any field, will tell you that formulating the principles of his art would be a presumptuous and sterile procedure. Interrogators are born, not made, he almost says, and good interrogation is the organic product of intuition, experience, and native skill, not reducible to a set of mechanical components. Yet the organic whole can usefully be dissected, and examination will reveal its structural principles.

This article selects from the many different ramifications of the interrogation art that *genre* which is applicable to suspected agents under arrest, and sets forth some of the principles and procedures which characterize it. The essay is slanted toward relatively unsophisticated cases, and does not cover the subtler techniques which should be used, for example, against a suspected double agent, nor those required when access to the subject or the control of his person is limited. It does, however, treat interrogation as a process designed to yield the highest possible intelligence dividend. Such an interrogation is usually incompatible with one intended to produce legal evidence for a court conviction, since statements by the accused may be barred as court evidence on the ground that they were made under duress, during prolonged detention without charge, or in some other violation of legal procedures.

An interrogation yields the highest intelligence dividend when the interrogee finally becomes an ally, actively cooperating with the interrogator to produce the information desired. It is to a discussion of principles and procedures helpful in transforming a recalcitrant prisoner into something approaching an ally that this article is devoted. This kind of interroga-

tion is essentially a battle of wills in which the turning-point is reached as the subject realizes the futility of his position. It usually develops in three tactical phases: a) breaking the cover story; b) convincing the subject that resistance is pointless and acquiescence the better part of valor; and c) getting active cooperation.

The question of torture should be disposed of at once. Quite apart from moral and legal considerations, physical torture or extreme mental torture is not an expedient device. Maltreating the subject is from a strictly practical point of view as short-sighted as whipping a horse to his knees before a thirty-mile ride. It is true that almost anyone will eventually talk when subjected to enough physical pressures, but the information obtained in this way is likely to be of little intelligence value and the subject himself rendered unfit for further exploitation. Physical pressure will often yield a confession, true or false, but what an intelligence interrogation seeks is a continuing flow of information.

No two interrogations are the same. The character, behavior, and degree of resistance of each new subject must be carefully assessed, and his estimated weaknesses used as the basis of a plan for intensive examination and exploitation. Each interrogation is thus carefully tailored to the measure of the individual subject. The standard lines of procedure, however, may be divided into four parts: a) arrest and detention; b) preliminary interview and questioning; c) intensive examination; and d) exploitation. The first three stages may often be merged; they constitute the softening-up process during which the cover story is broken and the subject may be shown up as a liar, an important step in making him realize the futility of further resistance.

In the matter of proving the subject a liar a word of caution is necessary. Showing some subjects up as liars is the very worst thing to do, because their determination not to lose face will only make them stick harder to the lie. For these it is necessary to provide loopholes by asking questions which let them correct their stories without any direct admission to lying.

When the cover story and the will to resist have been broken, when the subject is ready to answer a series of carefully prepared questions aimed at an intelligence target, the exploitation can begin, often in a veiled spirit of cooperation and mutual assistance. At this stage the interrogation may for example be moved to an office assigned the subject, where he might even be left alone for a few minutes to show that he is being trusted and that there is something constructive for him to do. This feeling of trust and responsibility can be very important to a broken subject, because he may now have suicidal inclinations; he must be given something to occupy his mind and keep him from too much introspection.

We shall examine in detail each stage of the interrogation procedure after a word on the language problem. Without doubt an interrogator using the subject's language is in a much better position than one who has to work through an interpreter. But the interrogation skill is infinitely more important than the language skill, and a good linguist should not be substituted for a good interrogator. In the absence of an interrogator who speaks the language, an interpreter should be used, preferably one with some training in interrogation techniques. It is very important that the interpreter not only report accurately what both parties say but also reflect as faithfully as he can their inflection, tone, manner, and emphasis. He should try to become part of the furniture in the room rather than a third personality, and the interrogator should act as though he were not there.

Arrest and Detention

The interrogations officer, since his critical objective is breaking the subject's will to resist, should attempt to control the psychological factors in every aspect of the subject's life from the earliest possible stage, normally the time of arrest. If possible, he should plan in advance the conditions of arrest and immediate detention. If the subject is already in detention, the principles set down in the following paragraphs may be applied to his removal from ordinary detention to the place of interrogation.

The arrest should take the subject by surprise and should impose on him the greatest possible degree of mental discomfort, in order to catch him off balance and deprive him of the initiative. It should take place at a moment when he least expects it and when his mental and physical resistance is at its lowest. The ideal time which meets these conditions is

in the early hours before dawn, when an abrupt transition from sleep to alert mental activity is most difficult.

If the arrest cannot be made during the pre-dawn sleep, the next best time is in the evening, when a person is normally relaxed in his own home. One is most impressionable when relaxing at home, as witness the findings of advertising firms who have studied the impact of television commercials. A less desirable time is in the morning when the day's routine begins, especially in the case of underground personnel, because they will have thought through the day ahead of them and steeled themselves to its risks.

The police detachment which effects the arrest, or removal from detention to the interrogation center, should impress the prisoner with its cool efficiency and assurance. This scene is important enough to justify a rehearsal, if necessary. A subject arrested by three or four ill-dressed, clumsy policemen is more likely to regain his composure after the initial shock and draw some confidence from his superiority over his captors. If he is abruptly awakened by an arresting party of particularly tall, smart, well-equipped and business-like officers, he will probably be exceedingly anxious about his future.

The arresting party should also be schooled in observing the prisoner's reactions and in the techniques for a quick but thorough search of his room and person. In ordinary arrests there are arguments for having the prisoner witness the searching of his room: he cannot then claim theft or willful damage to his property; he can be asked questions about what is found; and his reactions may help the searchers uncover hidden objects. But during the search preceding an intelligence interrogation it is usually better to have the subject out of the room; his ignorance as to what has been found there will foster uncertainty and uneasiness in his mind. One member of the arresting party should be specifically charged with watching the prisoner's reaction to everything that goes on.

Other aspects of the arrest and the conditions of initial detention should be governed by the interrogator's preliminary assessment of the subject's personality and character on the basis of records, reports, and any other sources available. If, for example, the prisoner belongs to a subversive organization which makes a practice of stressing the harsh and summary

treatment its members should expect if they let themselves fall into the hands of the security authorities, the arresting party might make a point of treating him correctly and even courteously. This unanticipated finesse might disconcert his antagonism and be a useful factor in winning him over later.

Some of the alternative detention conditions from which the interrogator must choose according to his preliminary assessment of the subject are: a) a long period or brief interval between arrest and initial questioning, b) solitary confinement or quartering with other prisoners, c) comfortable or discomfiting accommodations, and d) subjection to comprehensive personal search or no. Some subject-types would be enabled by any delay between arrest and questioning to firm up a cover story, regain their composure, and fortify themselves against the interrogation. On the other hand, a prisoner left in solitary confinement for a long period with no one, not even his custodian, speaking a word to him may be thoroughly unnerved by the experience. When this course is chosen it is important to deprive the prisoner of all his personal possessions, especially of things like snapshots and keepsakes, symbols of his old life which might be a source of moral strength to him.

Other techniques which may or may not be employed at this stage, according to the subject's personality, include the use of a stool-pigeon, the double stool-pigeon routine, microphoning the cell and doctoring it in other ways. The double stool-pigeon technique has two stool-pigeons in the cell when the prisoner arrives. One of them befriends him, warns him that the other is a stool-pigeon, and if possible enlists his help in agitating for the removal of this plant. When the third man has been removed the subject may have come to trust his fellow-agitator and confide in him. The cell can be doctored by having messages written on the walls, either with deceptive content recommending for example some attendant as a sympathetic channel to the outside or with discouraging and depressive impact.

The Preliminary Interview

The preliminary interview is not intended to obtain intelligence, but only to enable the interrogators to make a firm assessment of the character and type of subject with whom they will have to deal. It is useful to have the interrogators — pre-

ferably two of them — seated behind a table at the far end of a long room, so that the subject after entering will have some distance to walk before taking his chair in front of them. This device will enable them to observe his poise and manner, and may often quite unsettle the subject. The interrogators should sit with their backs to the main source of light in order to obscure their faces, veil their expressions, and place a strain on the prisoner.

The subject can be placed under further strain by providing him an uncomfortable chair, say one with a polished seat and shortened front legs so that he tends to slide off it, or one with wobbly legs. On the other hand, an opposite technique has sometimes been successful: the prisoner is made so comfortable, after a hearty lunch with beer, that he drops his guard in drowsiness.

The interview must of course be recorded, either on tape or in stenographic notes. The interrogators must on no account try to do this job themselves; it would distract them from the critical task of framing questions and steering the course of interrogation according to the implications of the subject's replies. Whether the stenographer or recorder should be concealed or visible depends on the subject's sophisication and the state of his alert. If the recording process is not evident some subjects may become careless of what they say when they see that the interrogators are not taking notes, whereas a visible recording would alert them to be more cautious. For others, consciousness of a recording going on in full view may be unnerving, and they may betray the weak links in their stories by showing signs of distress at these points.

At a later stage of the interrogation it may be of value to play back to the subject some part of this recording. The sound of his own voice repeating his earlier statements, particularly any with intonations of anger or distress, may make a psychological breach in his defenses.

The attitude of the interrogators at the preliminary interview should usually be correct, studiously polite, and in some cases even sympathetic. It is imperative that they keep their tempers both now and throughout the interrogation. The prisoner may be given the true reason for his arrest or a false one, or he may be left in doubt, according to the circumstances

of the case. The interrogators must try to determine whether his usually vigorous protestations of innocence are genuine or an act, but they should not at this stage give any indication of whether they believe or disbelieve him. A clever prisoner will try to find out how much the interrogators know; they should at all costs remain poker-faced and non-committal.

At this interview the interrogators should do as little as possible of the talking, however many questions they are anxious to have answered. The prisoner should be asked to tell his story in his own words, describe the circumstances of his arrest, give the history of some period of his life, or explain the details of his occupation. The object is to get him to talk without prompting in as much continuous narrative as possible; the more he talks the better the interrogators can assess his personality.

Personalities are individual, but some typing of subjects can be done cutting across factors of race or background. One category displays no emotion whatever and will not speak a word; another betrays his anxiety about what is going to happen to him; a third is confident and slightly contemptuous in his assurance; a fourth maintains an insolent attitude but remains silent; a fifth tries to annoy his interrogators by pretending to be hard of hearing or by some trick like repeating each question before answering it.

After the interview the interrogators should confer, formulate their assessment of the subject's character, and work out a plan of intensive examination, including the kind of detention conditions to be applied between questionings. The details of this plan will vary widely, but it will be based on two principles, that of maintaining psychological superiority over the prisoner and that of disconcerting his composure by devices to bewilder him.

The Intensive Examination

The intensive examination is the scene of the main battle of wits with the prisoner, having the critical objective of breaking his cover story. The cover story, if it is a good one, will be a simple explanation of the subject's activities as a straight-forward normal person, plausible even to his close friends, containing a minimum of fabrication and that minimum without detail susceptible to a check or ramifications capable of devel-

opment. Its weakness may often lie in the subject's abnormal precision about certain details, especially when two or more subjects are using the same cover story.

The most difficult subject is one who will not talk at all, and prolonging his solitary confinement usually increases the difficulty of getting him to talk. It is best to put him into a labor gang or some such group of prisoners where he may be drawn into conversation. After some days or perhaps weeks he may be communicating normally with these others, and may have concluded that his interrogators have given him up for good. At that time some incident can be created involving the labor gang which requires that they all be questioned. If innocuous questions are put to the silent prisoner rapidly in a routine and indifferent manner, he may answer them. He may then find it hard to revert to complete silence if caught off guard as the questioning is switched without break to matters of real interest. The device of starting with questions easy for the subject to answer is useful with many whose replies to significant questions are hard to elicit.

Everything possible must be done to impress upon the subject the unassailable superiority of those in whose hands he finds himself and therefore the futility of his position. The interrogators must show throughout an attitude of assurance and unhurried determination. Except as part of a trick or plan they should always appear unworried and complete masters of the situation in every respect. In the long and arduous examination of a stubborn subject they must guard against showing the weariness and impatience they may well feel. If a specialist in the subject's field is used to interrogate him, say scientist to interrogate a prisoner with a scientific specialty, this interrogator must have unquestioned superiority over the subject in his own field.

Many prisoners have reported amazement at their own capacity for resistance to any stable pressures or distresses of an interrogation, such as onerous conditions of confinement or the relentless bullying of a single interrogator. What is demoralizing, they find, is drastic variation of cell conditions and abrupt alternation of different types of interrogators. A sample device in the regulation of cell conditions for unsophisticated prisoners is the manipulation of time: a clock in a windowless cell

can be rigged to move rapidly at times and very slowly at others; breakfast can be brought in when it is time for lunch or in the middle of the night's sleep; the interval between lunch and dinner can be lengthened to twelve or fifteen hours or shortened to one or two.

The questioning itself can be carried out in a friendly, persuasive manner, from a hard, merciless and threatening posture, or with an impersonal and neutral approach. In order to achieve the disconcerting effect of alternation among these attitudes it may be necessary to use as many as four different interrogators playing the following roles, although one interrogator may sometimes double in two of them:

First, the cold, unfeeling individual whose questions are shot out as from a machine-gun, whose voice is hard and monotonous, who neither threatens nor shows compassion.

Second, the bullying interrogator who uses threats, insults and sarcasm to break through the subject's guard by making him lose his temper or by exhausting him.

Third, the ostensibly naive and credulous questioner, who seems to be taken in by the prisoner's story, makes him feel smarter than the interrogator, gives him his rope and builds up false confidence which may betray him.

Finally, the kind and friendly man, understanding and persuasive, whose sympathetic approach is of decisive importance at the climactic phase of the interrogation. He is most effectively used after a siege with the first and second types, or after a troubled sleep following such a siege.

The course of the intensive questioning cannot be standardized, but some useful procedures are outlined in the following paragraphs.

When the subject is brought in he is asked to tell again the story he gave at his preliminary interview. Then he is asked to repeat it, and again a third time. He will be annoyed and with luck might even lose his temper. He at least will be worried about possible inconsistencies among the four versions he has given. In some cases it will be better that the interrogator not disclose his awareness of any such inconsistencies; in others it may be advantageous to emphasize them by making a comparison in his presence and perhaps playing back a recording.

If the cover story is still intact, the next step is to probe for detail. One of two interrogators questions rapidly into many details of a particular aspect of some incident. Then the other puts detailed questions on another aspect of the same incident. Then the first takes up a third aspect, and so on alternately for some time. The object is to force the subject to invent detail hastily. Finally, without any break, the interrogators start going back over their detail questions a second time; and the subject, not having had time to fix his improvisations in mind, is most unlikely to remember them.

By deliberately misquoting the subject's replies the interrogator may often succeed in confusing him, or better yet in irritating him and making him lose his temper. A talkative subject should always be encouraged to give full and lengthy explanations; he is likely of his own accord to get mixed up and introduce inconsistencies into his story. Catching the subject in a lie of relatively little importance sometimes unnerves him and starts his resistance crumbling.

A not too sophisticated subject can be told that his fellow-conspirators have let him down, that an informer among them has betrayed his secret, or that some of them are in custody and have been persuaded to talk. Incriminating testimony from others, true or false, can be read to him, or a hooded man can pretend to recognize and identify him. The subject can be placed in profile at a window while two guards lead a "prisoner" past outside who will send in word that he recognizes his true identity.

Sometimes a very long period of silence while the interrogators are pretending to go over critical evidence will unnerve the subject.

The whole procedure is a probe for an opening — a confession of guilt, an admission to having lied, a state of confusion or even extreme concern on some particular point. Once an opening is found, however small, every effort is concentrated on enlarging it and increasing the subject's discomposure. At this stage he is allowed no respite until he is fully broken and his resistance at an end.

The Exploitation

When the subject has ceased to resist his interrogators and is ready to talk freely he must be handled with great care, both

because this attitude may change and because he may now have suicidal impulses. He should get better treatment and better detention conditions. He should be induced to ally himself with his interrogators, and encouraged to believe that he is doing something useful and constructive in assisting them. It is often important to keep him hard at work regardless of whether the product of his efforts is of any real value; he could be asked to write out a lot of details about his subversive organization, for example, whether or not such information were required. The object is to keep him busy, to keep his mind occupied, to prevent his having time for introspection.

Since interrogators for the exploitation must be well acquainted in the particular field of information involved, it may now be necessary either to introduce new specialist interrogators or to give the earlier ones a thorough briefing in this field. Which course is better will depend on the subject's character, the way he was broken, and his present attitude toward those who have been handling him. Sometimes only a fresh interrogator can get real cooperation from him. Sometimes, on the other hand, he is so ashamed of having broken that he is unwilling to expose himself further and wants to talk only to his original questioner. And sometimes he has built up a trustful and confiding relationship with his interrogator which should not be destroyed by the introduction of another personality.

A member of the responsible IAC staff makes a comparative evaluation, from the intelligence viewpoint, of mechanisms for the control of East-West exchange visits.

THE INTELLIGENCE HAND IN EAST-WEST EXCHANGE VISITS

Guy E. Coriden

Exchange visits with the Soviet Bloc have now become a prominent feature of East-West relationships. Such visits have been lauded by both Eastern and Western statesmen as an ideal method for bringing the peoples into contact and thereby lessening world tensions. Scientists have said that the free interchange which is provided by direct contact is essential if man is to make maximum progress in his battle to conquer nature and the elements. Men of good will have reiterated the necessity for peoples of the world to know each other and to share the gifts they possess with those who are in need of them. Last, and maybe least from any point of view except that of this community, exchanges have been considered as vehicles for the collection of foreign positive intelligence.

It is clear that many different agencies and interests must be involved in the planning of exchanges. While the aims of these different interests are not necessarily incompatible, it sometimes seems that they are, especially to those attempting to reconcile the views of the many participants. In organizing specific exchanges one finds that in addition to group interests each individual involved seems to have his own axe to grind. The US citizen playing host to Soviet citizens may be using Soviet attendance to increase the attractiveness of his conference, may have a financial profit motive, may be attacking the problem of East-West enmity in his own personal way, or may just wish to show off his plant or university to a Soviet acquaintance he met at a European conference. The US citizen visiting the USSR has an additional motive, the desire to see for himself just how the two countries compare. After we have loaded on all the personal aims and hopes, the exchange

must pass through the channels of Government, where it encounters the cross-currents of other purposes. Among these are intelligence collection, technical gain, propaganda objectives, internal security, interagency rivalries, and national policy.

Some semblance of this maze of complications must face those in any nation who are attempting to organize exchanges. This community's professional objective is to derive from them a maximum intelligence yield consistent with national policy objectives. A comparison, from the viewpoint of this objective, of the different methods and mechanisms used by different countries for carrying out exchange programs may be useful to us. This article will review the procedures in use in four countries: the United States, where we who are involved in the program know it at first hand;

25X1

the USSR, where we only guess at the set-up on the basis of our experience with the other three countries.

The US Program

In the United States, the principle of a US–USSR exchange visits program has been indorsed at the highest levels. The President introduced the principle at the 1955 Geneva Conference and has spoken favorably of the program many times since. There is a National Security Council directive, NSC #5607, which instructs the Secretary of State to carry out the program. Pursuant to this administration policy the Department of State has established a Special Assistant to the Secretary for East-West Contacts and an East-West Contacts Staff (EWC) under the Assistant Secretary of State for Public Affairs. EWC uses an informal interagency panel to keep other offices of the Department and other interested Government agencies informed of developments, and the opinions and recommendations of these agencies are in turn funneled back through the panel members.

The intelligence community has established the IAC Ad Hoc Committee on Exchanges as a forum for intelligence views on exchange matters. Because only the intelligence community concerns itself with *all* scientific, technical, and economic information from the Soviet Bloc, this IAC Committee can be considered the logical place in the US Government to weigh

the possibilities of a gain to the United States from a technical and intelligence point of view. The Department of State, of course, must weigh any intelligence consideration together with policy and propaganda considerations and arrive at a final decision concerning a specific exchange.

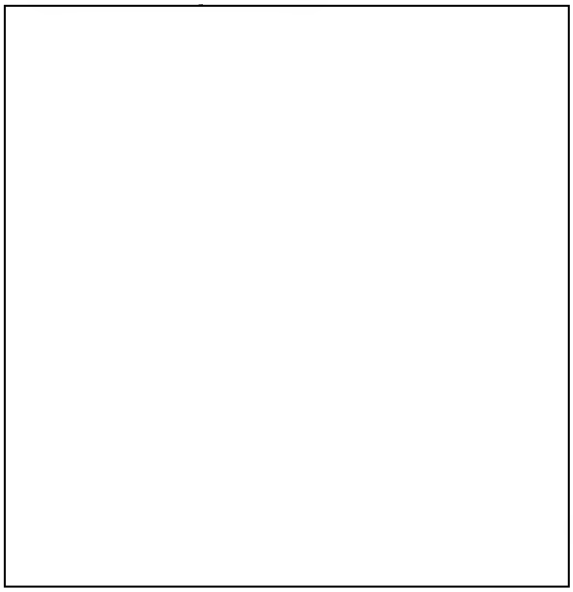
Administration policy calls for extracting reciprocity from the Soviet Union for any privileges accorded in connection with the exchange program. It is through this reciprocity that we hope to arrange tours to installations and areas of the USSR previously unvisited; and the IAC Ad Hoc Committee on Exchanges endeavors to provide continuing support to EWC in applying this policy during the course of negotiations on exchanges. It is evident that the hard insistence on reciprocity has hampered the Soviets. While it has not forced them to open the door wide, it has revealed their sensitivity regarding certain areas and has given us access to previously unvisited installations. On the other hand, EWC is hampered in its effort to extract the maximum privilege by reciprocity because Government funds are not available to guarantee that a negotiated exchange will be carried out.

Since not only the US and Soviet Governments, but also private US citizens originate exchanges, EWC has some problem with those who, proceeding from newspaper accounts of an open exchange policy, make elaborate arrangements for entertaining Soviet visitors in the United States without considering either the principle of reciprocity or the possibility that other negotiations might be going on for exchange visits in the same field of interest. As the policy of the Government toward reciprocity has become more widely known, however, it has been complemented by a desire on the part of US private bidders for Soviet visits to make visits to the USSR themselves. The Soviets have involuntarily assisted in selling the reciprocity principle to US citizens by their apparent inability to provide return invitations and other social amenities which contribute to a smooth program and friendly visits.

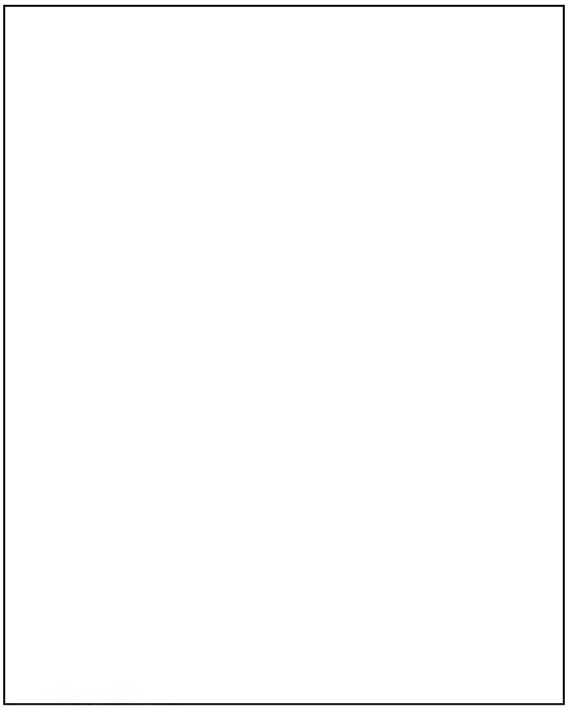
In an added effort to obtain information compensating for the vast store of knowledge about the United States which the USSR has at its disposal because of our freedom of publication, the Department negotiated an extensive exchange agreement on 27 January 1958. This agreement covered some aspect of all technical, educational, cultural, athletic, scientific, and gov-

ernmental fields. It provided a working base for developing a successful exchange program, but was not intended as a maximum limit. By suggesting appropriate additions to this agreement, the United States has now developed a schedule of exchanges which promises to give us at least an even break from all viewpoints. Because in a democratic system control over the actions of private citizens cannot be complete, the development of the program has required a good deal of careful handling. The procedure has been to give advice and consultation to the many US citizens involved through EWC, as the designated Government entity, and to make it a focus for the responsible opinions of the Government agencies concerned.

25X1



 25X1



Soviet Practices

The USSR approaches the program in the entirely different way made possible by its totalitarian control, which enables it to present a single face to the world and issue a single invitation concerning any subject exchange. It also has a clear aim of technical and propaganda gain for its program. It is hampered in negotiations, however, by some evident internal dis-

agreements over methods and by the complexity of its bureaucracy.

The location of the real focus of the exchange effort in the USSR is not known. The Soviet Academy of Sciences is the front for the scientific exchange effort, and the other special ministries handle cultural exchanges. Most technical exchange proposals are handled by the Ministry of Foreign Affairs. There is strong evidence that individual Soviet citizens who have answered or extended invitations without consulting some proper authority have done so to their detriment. There is also ample evidence that delegates participating in official exchanges have been chosen for the usefulness of their abilities without regard to their personal desires to make the trip. One Soviet scientist reported to a friendly US interpreter that he had arrived in Moscow in response to a summons without so much as a toothbrush in hand. He was instructed to acquire the necessary equipment to enable him to spend three weeks in the United States beginning the next morning.

On the minus side, the prolongation of itinerary negotiations for as much as six months in some cases indicates that the conflict in the USSR between those desiring technical gain and those concerned with internal security is more of a problem than it is in any of the Western countries. The continued statements warning Soviet citizens about free interchange of information with Western visitors, coupled with the insistence that Soviet delegations bring their own interpreters, leads one to believe that the USSR is concerned about the amount of information seeping out from under the Curtain. The evidence also suggests that the Soviets, like the Western countries, do not consider their exchange program to be completely successful. Their continued efforts to arrange long-term exchanges in the fields of most interest to them shows that they have not yet harvested the amount of technical knowledge they desire. These negative features, however, do not indicate that the Soviets have not made technical gains or have provided us with startling amounts of information. There is evidence to show that the visits have brought home to them some Western technical methods which should have been at their disposal from their thorough coverage of Western literature but apparently required personal experience to be accepted and assimilated.

When faced with stiff reciprocal proposals, the Soviets have changed tactics several times in their apparent effort to obtain a net technical gain by getting many Soviet specialists intensively exposed to advanced US installations. Originally they suggested straight exchanges with only loose agreement on itineraries, apparently hoping that they would be able to plan their own visit on the scene while limiting US access to their installations by heavy social schedules and a very well guided tour. When resistance was encountered, they sought attendance at conferences in the United States, attempting to arrange tours following the conferences in exchange for treks down the same worn paths in the USSR. The next tactic was the long-term (three to six months) exchange; this was quietly abandoned, at least for the moment, when fields other than those named by them were counterproposed. The current gimmick seems to be an effort to catch us off balance by partial agreement to one of our counterproposals at the last minute after long amicable negotiations; the concession calls for US agreement to something less than we requested, if elaborate plans are not to be discarded.

These tactical maneuvers are not nearly as clear as they appear in the telling, and perhaps not as deliberate. Their description is distilled from a vatful of experience which leaves unexplained in the residue a number of spurned nonreciprocal requests in key fields, projects abandoned without explanation after frenzied effort, and visits to key places on a free basis refused. But it seems safe to say that the Soviet exchange visits group has not reached its goal and has not so far mustered the assets to do so.

Comparative Evaluation

The process in each of the four countries, with its composite of aims, attitudes, and mechanisms, has some advantages and disadvantages from the standpoint of the intelligence collector. 25X1

[redacted]

The Soviet system has the advantage of a clear aim and unlimited resources. This advantage is offset to a substantial degree by an unwill-

ingness to allow visits to trouble spots even to secure desired ends and by the apparent fact that internal security forces have the upper hand and can frustrate efforts to gain technical knowledge. The wholehearted cooperation among agencies in the US program enables the intelligence community to plan for penetration of targets in the USSR in the expectation of exploiting the full extent of Soviet willingness to pay for technical familiarization. The lack of US financial support and the strong influence of private aims incongruent with the intelligence plan are offsetting factors. Although in our struggle with these problems we sometimes look with envy at our opposite numbers in the other countries, our own advantages seem on balance just a little greater than theirs.

A sophisticated tourist describes how he casually probed weak spots in the Iron Curtain.

A NOTE ON CASUAL INTELLIGENCE ACQUISITION

Amerikanskiy Turist

"Your pass, please," crisply asked the guard. "Oh, the Devil! I left it home." With a gesture of annoyance tempered by indifference, the guard motioned me into the Frunze Soviet Army Club in Moscow. And so I wandered around and cased the place. The auditorium was ultramodern, well equipped for several hundred guests. The luxury of the surroundings for the senior and field-grade officer class which frequents this elite officers' club was evident in the mosaic murals and paintings depicting in warm colors the past battles of the Red Army. No secrets lying about—but a laxity on the part of the guard reflecting his assumption that, after all, no unauthorized Soviet citizen would *try* to get in.

So, too, in Tbilisi. When as a visitor from Moscow I inquired about a place I could relax in the evening, other than the restaurants or one pseudo-nightclub, someone mentioned the Voroshilov Club, down almost next to the Staff of the Transcaucasian Military District. So I sauntered into the Voroshilov Club, and was asked for my *bilet*. Surprised that a ticket would be required, I asked where to get one. When my inquiry was met with incomprehension, I adopted what I had observed to be a Soviet technique for overcoming perplexity, and began shouting I had a right to enter. Again, a shrug of the shoulders and I went in. Only later did I realize that the club was exclusively for Party members, and the attendant had been asking for my Party card (the Russian word being identical with that for a ticket)! In this case I was evidently taken as a visiting Czech or East German Communist.

But the greatest opportunities for casual intelligence collection may occur in places where no subterfuge is required to gain access. By cultivating a young lady working in a second-hand bookstore in Moscow, for example, I obtained a *classified* five-volume Soviet history of the Soviet-German campaigns of 1941–1945 prepared at the Frunze Military Academy (Com-

mand and Staff College), which a negligent Soviet officer, or perhaps his widow, had left in a group of books sold to an undiscerning bookseller. This work, much more comprehensive than any previously known to exist, is based on materials from *Military Thought* (the confidential theoretical military journal, published by a section of the General Staff for senior Soviet officers), unpublished war college lectures, and material from archives. It was written by a number of generals and colonels.

The military bookstores form a separate system of stores under the Military Publishing House of the Ministry of Defense, with branches in the dozen or so main cities. I visited some half dozen of these, and obtained various open publications (the artillery manual, internal service regulations, disciplinary regulations, etc.) and some factory and office civil defense posters. But in Leningrad, by exceptional chance—and by flashing a Soviet officer's identification card-holder I had picked up elsewhere, in a provincial military store—I bought another (1956) classified history of the recent war, and another study, put out by the Voroshilov Academy of the General Staff (National War College). This study, like the Frunze Academy series, had not previously even been known to exist.

These incidents illustrate the opportunities created by the difficulty Soviet citizens have in recognizing Russian-speaking foreigners (unless, of course, their dress is too evidently Western). On a number of occasions, after dealing at some length with a Soviet citizen, I have casually admitted the fact (which I had never done anything to conceal) that I was an American; and it came as an obvious surprise to them.

It is no news to any intelligence officer that libraries continue to be a useful source of intelligence. In the Soviet Union they are often most useful in indicating categories of items *not* available on security (or political) grounds. In some libraries, by filling out the forms required (including the notation "non-Party" in respect to Party status) and submitting one's passport to negligent inspection, it is possible to get a regular library pass to consult some areas in history and military affairs, for example, which are not open to all. The most useful library I found, however was the Fundamental Library of the Social Sciences of the Academy of Sciences, where I filled out no forms, did not identify myself except as a foreign

scholar, and yet obtained access to files including unpublished dissertations, political instructions in the armed forces, etc.

Security on military matters including ordnance—leaving aside the separate matter of airfields and field installations—is sometimes mildly compromised at the military museums. In the Frunze Aviation and Civil Defense Museum I was able to buffalo the attendants into allowing me to take flash color photographs of the engine of the TU-104 and certain other items which the US Air Attache's office had been denied permission to take. When as a foreign tourist I asked if it was permitted to take photographs, I was told, "In general, no." After arguing not "in general" but in particular (Why not? Of course if they were ashamed to have a foreigner take interest in their technological level . . .), I was finally granted permission. Similarly, at the Zhukovsky Aviation Section located at the Central Aerodynamics Institute, I succeeded in photographing scale models of various Soviet aircraft, including one prototype (identified even as to model) which we had never before seen! At the Naval Museum I was able to see, but unfortunately not to obtain (as it was secured under glass) the April 1957 "Instructions of the Central Committee to the Organizations of the CPSU in the Soviet Army and Navy," a document unpublished and, I believe, not yet in our possession.

My purpose in describing these incidents is to illustrate the little appreciated possibilities for casual intelligence collection by prepared travelers, aside from such routine opportunities as conversations with Soviet citizens and direct observation of installations encountered. Some of these opportunities are denied to attaches (e.g., photography in the Air Museums) but some of them can be exploited even by official representatives (e.g., coverage of second-hand bookstores to secure classified or rare published Soviet materials).

These and other techniques of casual intelligence acquisition can of course only supplement covert collection operations; but they have the advantage of legality. Some of them do require psuedo-impersonation and pseudo-naivete, and some require that the subject not be under surveillance at the time. Most of them require, in addition to knowledge of Russian, a detailed specific awareness of possible targets, that is, knowledge of requirements, of what is and is not already available, and of the location of institutions not publicly identified and

other such places. Often it is purely a matter of exploiting unpredictable potentialities, but these too can better be seized upon if examples are previously available.

This discussion does not pretend either to open an entirely new field nor to do more than note a few aspects of the subject. It is offered merely as an individual's observations on the unexhausted field of casual intelligence collection, based upon recent experience while traveling as a tourist in the U.S.S.R.

The product of a British "public corporation" is an integral and important part of what the U.S. intelligence community reads in its "FBIS."

THE BBC MONITORING SERVICE AND ITS U.S. PARTNER

Roland A. Way

The monitoring of foreign broadcasting stations was developed before the war, as government-controlled radios in Europe came to be used increasingly to publicize official communiques, policy statements by party and government leaders, and propaganda lines. A pioneer in the monitoring field was the British Broadcasting Corporation, a public corporation with a government monopoly on both domestic and external broadcasting and with a Treasury grant-in-aid for its broadcasts to listeners abroad. One of its most important activities was, and remains, the gathering and presentation of news.

In 1939, anticipating the drying up of many normal news sources with the imminent outbreak of war, the BBC determined to tap the news potential of foreign radio broadcasts, and in cooperation with the Ministry of Information began a monitoring operation in Evesham in Worcestershire. Although this operation was primarily a service to the BBC's own news output desks, the armed services and government departments quickly grasped its possibilities as a rapid source of information and encouraged its expansion. Coverage of foreign stations was increased and the material processed was issued to BBC output desks and government departments in daily mimeographed reports and over teleprinter hook-ups. In 1943 the monitoring unit moved to its present location at Caversham Park near Reading, and at the end of the war was reorganized and consolidated on a full peace-time basis under the administrative control of the BBC's External Services, responsible for broadcasts to listeners abroad.

By this time, monitoring of foreign broadcasts had also become a recognized war-time activity of the U.S. Government. The Foreign Broadcast Monitoring (later renamed "Intelligence" and then "Information") Service, which had been organ-

ized in 1941 under the FCC, placed a small number of editors with the BBC late in that year. This group cooperated with a local unit of the OWI in the selection and transmission to Washington of BBC-monitored material. When the OWI was dissolved in 1946 and FBIS became a Central Intelligence activity, the arrangement to post an American group with the BBC Service at Caversham was made permanent, and the two services entered into a reciprocal agreement for world-wide radio coverage. Under this agreement the BBC assumed responsibility for covering the central Soviet Home Service and Moscow's broadcasts to Europe, most Satellite transmitters and a scattering of stations in Western Europe and the Near and Middle East. FBIS assumed coverage of most of the rest of the world. The product of each service's monitoring is furnished the other by radioteletype in plain text.

The producing staff of the BBC Monitoring Service is distributed among three departments: the Reception Unit tunes in on selected broadcasts and makes summaries or translations from them; the News Bureau picks out "hot" items and writes them up for its wire service; and the Reports Department prepares comprehensive mimeographed reports covering the monitored material. The necessary technical facilities are provided by a section of the BBC Engineering Division. These consist of a primary antenna system on the grounds of Caversham Park, capable of receiving a high proportion of the broadcasts scheduled for monitoring, and a more elaborate intercept center some three miles distant, where those signals not receivable at Caversham are picked up and fed in by land line.

The Reception Unit operates around the clock on a shift system seven days a week. It covers broadcasts from 37 countries in more than 30 languages, processing some 150,000 words a day of the nearly two million it hears. Its schedules are kept under constant review to meet the requirements of BBC output, government departments, and other consumers, including notably the FBIS. Its coverage responsibility continues to embrace the whole critical segment of Moscow broadcasts in Russian and other European languages, as well as some regional Soviet stations, most stations in East Europe, and some in Western Europe and the Near East.

Each monitor is allocated certain broadcasts which he listens to and simultaneously records. Any news flashes he either reports immediately or transcribes promptly when the broadcast is over. Less urgent material required by the output departments he transcribes or translates into English later from the recording. It is his responsibility to make the preliminary selection of this material, guided by general and particular directives and to a great degree by his own area knowledge and good judgment, ripened by experience. The monitor's transcript is then transferred to a master stencil and reproduced for distribution to the principal receiving offices in the building—the News Bureau, Reports and FBIS editors.

The News Bureau runs the "ticker" of the Monitoring Service. From the broadcast material passed to it by the Reception Unit and that received by teleprinter from FBIS monitoring stations it selects and files some 20,000 words daily to the news departments of the BBC and the Foreign Office.

Production of documents is the responsibility of the Reports Department, which likewise receives the total take from both BBC and FBIS monitoring. A daily Monitoring Report sums up in two to three pages the main lines of emphasis in the previous day's world broadcasting. A special daily report reviews the principal trends of Middle East broadcasting. Summaries of World Broadcasts published bi-weekly cover the USSR, Eastern Europe and the Far East. Supplements to these are published daily or weekly as required: a Far East Economic Supplement is published regularly every week, for example, and a supplement covering the proceedings of the USSR Supreme Soviet appears daily while the meetings are in progress.

The British Foreign Office and Ministry of Defence use the product of the Monitoring Service in much the same way as the Washington intelligence community uses the FBIS wire and publications. Of special import and interest to the Ministry of Defence is a periodic report containing economic information from monitored Soviet regional broadcasts. U.S. intelligence, for its part, is acutely dependent on the products of the British service which it receives through FBIS. FBIS editors stationed at Caversham select for Washington some 50,000 words daily, principally from the vast USSR and East European radio output. This selection contains a large proportion of each day's important world news, press articles, statements of policy, and propaganda.

The BBC is organized to give speedy, preferential treatment to speeches by national leaders. In preparation for a two-hour address by Khrushchev, for example, the Reception Unit assembles the most experienced members of its Russian team. Before the broadcast begins monitors are assigned to listen to several of the assigned Moscow frequencies and to select one or two of the best. While the speech is in progress, play-by-play highlights are transcribed in English and distributed to the News Bureau and the FBIS editors, who relay them to Washington, by the highest appropriate precedence, through an FBIS wire room in the American Embassy. It is not uncommon that the first takes of these summaries are being read by subscribers to the FBIS Washington ticker before the broadcast from Moscow is completed. Meanwhile at Caversham other monitors have begun a full textual translation of the speech from the recordings. Portions of the finished product are distributed and filed in the same manner as the summaries.

Thanks to the combined efforts of the BBC and FBIS staffs at Caversham and at the London wire room, and to allocated communications channels which permit instantaneous transmission to FBIS Washington, our intelligence consumers come into possession of statements of important world figures with a minimum of delay, often within minutes after their utterance.

The FBIS transatlantic radio channels are two-way streets. While one side of a duplex is carrying BBC-originated material to Washington, the other is carrying to the BBC the selected files from Far East and Latin American radios monitored at FBIS domestic and Far East field stations. The BBC automatically gets the product of FBIS Near and Middle East monitoring on Cyprus, for it supplies the communications link which carries this traffic to London.

"Nation Shall Speak Peace Unto Nation." This motto of the BBC, which has such limited currency in the world today, applies in a striking way to the Anglo-American joint enterprise which listens to words of peace or war broadcast by friends, foes and neutrals. Sixteen years of collaborative efforts have produced an effective instrument for the exploitation on a world-wide basis of this overt and fruitful source of intelligence information. Without BBC partnership, the United States could obtain coverage of indispensable sources only by the construction of new and costly facilities. Despite some differences

in requirements and procedures, the two services have agreed on principles of operation, reaffirmed in periodic meetings on one or the other side of the Atlantic, which embody a high degree of compatibility and mutual confidence. In the character and scope of its activity and in the closeness of its working relationships, the BBC–FBIS combine affords a possibly unique example of enduring Anglo-American cooperation.

The story of a critical intelligence finding almost unrecorded in the history of French intervention in Mexico during and after the Civil War is reconstructed here from official records in the National Archives.

A CABLE FROM NAPOLEON

Edwin C. Fishel

The years 1864–67 saw the United States facing one of the severest international problems in its history: an Austrian prince ruled Mexico and a French army occupied the south bank of the Rio Grande. It was toward the end of this period that the Atlantic cable went into permanent operation. Thus the United States had both the motive and the means for what was almost certainly its first essay in peacetime communications intelligence.[1]

The nation had emerged from the Civil War possessing a respectable intelligence capability. Union espionage activities were generally successful, especially in the later stages of the war; Northern communications men read Confederate messages with considerable regularity (and received reciprocal treatment of their own traffic from the rebel signalmen); and there were intelligence staffs that developed a high degree of competence in digesting and reporting these findings.[2]

[1] No earlier use of communications intelligence by the United States in peacetime is known to the writer. Any reader who knows of one is urged to present it.

[2] At the beginning of the war the government's conception of military intelligence work was so limited that it employed Allan Pinkerton, by that time well known as the head of a successful detective agency, as the chief intelligence operative in Washington. Pinkerton proved effective in counterintelligence work, but his intelligence estimates so greatly exaggerated Confederate strength that he is commonly given a large share of the blame for the supercaution that caused his sponsor, General McClellan, to stay close to Washington with far superior forces. Pinkerton left the service with McClellan in 1862, however, and long before the end of the war competent intelligence staffs, entirely military in character though composed of men drawn from civil life, served the principal headquarters.

With the war over in 1865, this new capability was turned against Napoleon III and his puppet, Emperor Maximilian of Mexico. In the struggle to get the French army out of North America and Maximilian off his throne, this government had the use of an intelligence enterprise which, though conducted on a small scale, turned out to be very effective. Up to the last weeks this intelligence operation consisted of competent reporting on the part of espionage agents and diplomatic representatives; but when a crisis developed at that point, these sources were silent, and it was a cablegram from Napoleon to his commanders in Mexico that yielded the information needed by the nation's leaders.

As an intelligence coup the interception and reading of this message were hardly spectacular, for it passed over fifteen hundred miles of telegraph wire accessible to United States forces and, contrary to later assertions that it had to be deciphered, it appears to have been sent in the clear. Nevertheless, the event was an outstanding one in the history of United States intelligence operations, not simply because it represented a beginning in a new field but also because the message in question was of crucial importance.

State of the Union, 1861–65

The crisis in which America's intelligence capability asserted itself did not come until after the nation had spent five anxious years watching the European threat develop.

Napoleon had sent an army to Mexico late in 1861, assertedly to compel the payment of huge debts owed by the government of Mexico. His object, however, was not simply a financial one: a new commander whom he sent to Mexico in 1863 received instructions (which leaked into the press) to the effect that the Emperor's purpose was to establish a Mexican government strong enough to limit "the growth and prestige of the United States."[3] At a time when the American Union appeared to be breaking up under pressure from its southern half, such a statement meant to American readers that Napoleon had no intention of stopping at the Rio Grande.

[3] J. Fred Rippy, *The United States and Mexico* (New York, 1926), p. 261, citing Genaro y Carlos Pereya Garcia, *Documentos inéditos o muy raros para la historia de Méjico* (20 vols., Mexico City, 1903), XIV, pp. 8–20.

In June 1863 French arms swept the Liberal government of President Benito Juárez from Mexico City, and in the summer of 1864 Napoleon installed the Archduke Ferdinand Maximilian, thirty-two-year-old brother of Emperor Franz Joseph of Austria, on the new throne of Mexico. During this period the Northern people, their belligerence aroused by the Southern rebellion, were clamoring for action against France — action that might well bring disaster upon them. Aggressive behavior by the United States might give Napoleon the popular support he needed to join hands with the Confederacy in a declaration of war, a development that could provide Secession with enough extra strength to prevail.

While the Civil War lasted, Congress and the public were held in check largely through the prestige and political skill of the Federal Secretary of State, William H. Seward. But when the War was over — by which time the government had reason to believe that Napoleon had become disenchanted with his puppets in Mexico — Seward was ready to turn his people's aggressive demeanor to advantage, and he warned Napoleon that their will would sooner or later prevail. Before this statement reached Paris, however, the United States Minister there, John Bigelow, who had been mirroring Seward's new firmness for some months, had in September 1865 obtained a tentative statement from the French that they intended to withdraw from Mexico.[4]

While Bigelow was shaking an admonitory finger at the French Ministry of Foreign Affairs, an American military fist was being displayed before the French along the Rio Grande. Promptly upon the silencing of Confederate guns, General Grant sent Philip Sheridan, second only to William T. Sherman in the esteem of the General-in-Chief, to the command of the Department of the Gulf, with headquarters at New Orleans. A considerable force was posted along the Mexican frontier and designated an "army of observation."

[4] Rippy, *op. cit.*, pp. 264–65 and 269–72; Seward to Bigelow, September 21, 1865. All diplomatic correspondence sent or received by United States officials that is cited herein will be found in the *Papers Relating to Foreign Affairs Accompanying the Annual Message of the President* to the First Session, Thirty-Ninth Congress (covering the year 1865), Second Session, Thirty-Ninth Congress (1866), and Second Session, Fortieth Congress (1867–68).

Sheridan and Intelligence

Sheridan, thirty-four years old and the possessor of a reputation as a gamecock, adhered strongly to an opinion prevalent in the Army that a little forceful military action now would save a full-scale war later. The audacious statesman who was directing foreign policy at Washington was, to Sheridan, "slow and poky," and the general found ways of giving considerable covert aid to the Juárez government, then leading a nomadic existence in the north of Mexico.[5] Sheridan and Seward, though the policy of each was anathema to the other, made an effective combination.

One of the ways in which Sheridan could exercise his relentless energy against the Imperialists without flouting Seward's policy was in collecting intelligence on what was going on below the border. There was an interregnum at the United States Legation in Mexico City, and all the official news reaching Washington from below the Rio Grande was that supplied by the Juarist Minister to the United States, Matias Romero, a scarcely unbiased source if a prolific one.[6] Sheridan quickly undertook to fill the gap.

This task must have been decidedly to the general's taste, for he had been one of the most intelligence-conscious commanders in the Civil War.[7] He had achieved something of an innovation in organizing intelligence activities when, during his 1864 campaign in the Shenandoah Valley, he established a group of intelligence operatives under military control. His previous sources of information, local citizens and Confederate deserters, had both proved unreliable. "Sheridan's Scouts" were a military organization in a day when it was customary to have civilians perform most of the intelligence-gathering tasks other

[5] John M. Schofield, *Forty-Six Years in the Army* (New York, 1897), p. 381; Philip H. Sheridan, *Personal Memoirs* (2 vols., New York, 1888), II, pp. 215–19; Percy F. Martin, *Maximilian in Mexico* (London, 1914), p. 432.

[6] Dozens of examples of this intelligence will be found in the Romero-to-Seward correspondence in the *Papers Relating to Foreign Affairs* described in footnote 4.

[7] When a division commander in 1862–63, Sheridan had exercised an initiative in intelligence collection that was more likely to be found in an army commander. His *Memoirs* reveal a constantly high interest in intelligence activities.

than battle-zone reconnaissance. After the war, Major Henry Harrison Young, the Scouts' commander, and four of his best men went to the Gulf Department with Sheridan.

Sheridan also, in common with numerous other commanders North and South, had an acquaintance with communications intelligence as it was produced in the field command of that day. By the time the Civil War was well advanced, Signal Corpsmen in every theater had learned how to solve the enemy's visual-signaling alphabets, and they derived much information for the commanders by keeping their field glasses trained on enemy signal stations.[8] There was not likely to be any opportunity for such methods along the Rio Grande, however, and no more likely was the possibility of tapping telegraph lines carrying useful information.

Young and his four men were dispatched to important points in northern Mexico to report on movements of the Imperial forces and the various projects of ex-Confederates who were joining Maximilian's forces and attempting to establish colonies under his flag.[9] Judged by the accuracy of the reports reaching Sheridan and the strong tendency of the Southerners' projects to abort after coming under his notice, the work of these five men was most effective.[10]

1866, Year of Telegrams and Tension

The critical question — whether the French would tire of their venture and withdraw — was, however, one to which no intelligence service could divine an answer, for the French for a long time did not know the answer themselves. In 1865 Marshal François Achille Bazaine, now Napoleon's commander in Mexico, was informed by the Minister of War that he must bring the army home, and at about the same time he received

[8] *War of the Rebellion: Official Records of the Union and Confederate Armies* (Washington, 1884–1901) contains hundreds of decipherments resulting from such interceptions, chiefly in the operations of 1863–65 in Tennessee and Georgia, the operations along the South Carolina coast beginning in 1863, and the Richmond-Petersburg siege of 1864–65.

[9] Sheridan, *op. cit.*, II, p. 214.

[10] See, for example, intelligence reports sent by Sheridan to Grant, March 27, May 7, June 24, July 3 and 13, 1866. All Army correspondence cited hereafter in this article will be found in the United States National Archives, except where otherwise indicated.

word to the opposite effect from the Emperor himself.[11] Napoleon's treaty with Maximilian by which the latter accepted the throne of Mexico contained a secret clause providing that French military forces to the number of 20,000 were to remain in Mexico until November 1867.[12] As events were to prove, however, this compact was less likely to determine Napoleon's course of action than were the pressures on him represented by the United States' vigorous diplomacy and the rising military power of Prussia.

In April 1866 Minister Bigelow succeeded in pinning Napoleon down to a definite understanding, to the effect that the 28,000 French soldiers in Mexico would be brought home in three detachments, leaving in November 1866 and March and November 1867. Seward's reply to this promise was characteristic of his tone at this time: dwelling only briefly on the diplomatic niceties, he suggested that the remaining period of occupation be shortened if possible. The Secretary was in high feather; in the same month a protest by him induced the Austrian government to abandon an effort to send substantial reinforcements to the small Austrian force in Maximilian's army.[13]

In June Maximilian received a studiously insolent letter from Napoleon containing the stunning announcement that the French would withdraw. Attention now focused on whether he would attempt to hold his throne without French arms. The unhappy sovereign reacted first by dispatching his Empress, twenty-six-year-old Carlota, to Paris in a vain attempt to change Napoleon's mind. He soon decided to abdicate, then determined to remain on his throne, then wavered for many weeks between abdicating and remaining.[14]

Napoleon meanwhile had to contend not only with his protégé's indecision but with some apparent recalcitrance on the

[11] Philip Guedalla, *The Two Marshals* (London, 1943) p. 130.

[13] *Ibid.*, p. 112.

[13] Seward to de Montholon, April 25, 1866; Seward to J. Lothrop Motley (United States Minister to Austria), April 6, 16, 30, May 3, 30, 1866; Motley to Seward, April 6, May 1, 6, 15, 21, 1866; James M. Callahan, *American Foreign Policy in Mexican Relations* (New York, 1932), p. 235.

[14] Martin, *op. cit.*, pp. 266–267 and 272–273.

part of Bazaine, who was variously suspected of having a secret agreement with Maximilian to remain in the latter's support, of being secretly in league with the Mexican Liberals, of profiting financially from his official position, and of having hopes of succeeding Maximilian. (There is evidence to support all these suspicions.) [15] Soon Napoleon realized he had made a bad bargain with the United States; to attempt to bring the army home in three parts would risk the annihilation of the last third. Early in the autumn of 1866 the Emperor sent his military aide, General Castelnau, to Mexico with instructions to have the army ready to leave in one shipment in March, and to supersede Bazaine if necessary. Thus the evacuation was to begin four months later than Napoleon had promised, but to end eight months earlier.[16]

No word of this important about-face was, however, promptly passed to the United States government. At the beginning of November — supposedly the month for the first shipment — the best information this country's leaders possessed was a strong indication that Napoleon intended to rid himself of Maximilian. This was contained in a letter written to Maximilian by a confidential agent whom he had sent to Europe; it showed the failure of Carlota's visit to Napoleon. Somewhere between its point of origin, Brussels, and its destination, the office of Maximilian's consul in New York, it had fallen into the hands of a Juarist agent.[17] Soon after Minister Romero placed it in Seward's hands, Napoleon's new Foreign Minister, the Marquis de Moustier, wrote his Minister in Washington, de Montholon, that the evacuation timetable was raising serious difficulties but that in no case would the November 1867 deadline for its

[15] Castelnau to Napoleon, December 8, 1866, quoted in Georges A. M. Girard, *La Vie et les souvenirs du General Castelnau* (Paris, 1930), pp. 112–124; Marcus Otterbourg (United States charge d'affaires in Mexico) to Seward, December 29, 1866; Martin, *op. cit.*, pp. 298–99; Lewis D. Campbell (United States Minister to Mexico) to Seward, November 21, 1866.

[16] De Moustier (Foreign Minister) to de Montholon (Minister to the United States), October 16, 1866, in *Foreign Affairs;* Bigelow to Seward, November 8, 1866; Martin, *op. cit.*, pp. 56–57; Guedalla, *op. cit.*, p. 133; Girard, *op. cit.*, p. 122.

[17] Romero to Seward, October 10, 1866; *New York Tribune*, January 4, 1867.

completion be exceeded.[18] This note should have reached Seward in early November (1866), but if it did, its strong hint that there would be no partial evacuation in that month was apparently lost on him.

When the French felt able to promise complete withdrawal in March, de Moustier revealed to Bigelow the abandonment of the three-stage plan. So alarmed was Bigelow by the prospect of a major outbreak of anti-French feeling in America that he refrained from sending the news to Seward until he had heard it from the Emperor himself, whom he saw on November 7. The November shipment had been cancelled for reasons purely military, the Emperor said, showing surprise that the United States had not known of the change. The order had been telegraphed to Bazaine and had been sent in the clear in order that "no secret might be made of its tenor in the United States."[19] Undoubtedly the Emperor was perfectly sincere in implying that he expected the United States government to make itself a tacit "information addressee" on telegrams of foreign governments reaching its territory.

Receiving Bigelow's report of this interview, Seward struck off a peremptory cablegram to Paris: the United States "can not acquiesce," he declared. The 774 words of this message unfolded before Bigelow on November 26 and 27, their transmission having cost the State Department some $13,000. On December 3 Bigelow telegraphed the Foreign Minister's assurance that military considerations alone were responsible for the change of plans and his promise, somewhat more definite than the previous one, that the French "corps of occupation is to embark in the month of March next."[20]

So strongly had this government relied on Napoleon's original promise that President Johnson had dispatched an important diplomatic mission to Mexico (republican Mexico, that is) — a mission that was already at sea, expecting, on arrival at Vera

[18] De Moustier to de Montholon, October 16, *loc. cit.*

[19] Bigelow to Seward, November 8, 1866.

[20] Seward to Bigelow, November 23, 1866; Dexter Perkins, *The Monroe Doctrine, 1826-1867* (Baltimore, 1933), p. 534; Bigelow to Seward, December 3, 1866.

Cruz, to find the French leaving and Juárez resuming the reins of government. The mission consisted of ex-Senator Lewis D. Campbell, newly appointed Minister to Mexico, and General William T. Sherman, sent with Campbell to give the mission prestige, to advise Juárez in regard to the many military problems that would be plaguing him,[21] and possibly to arrange for the use of small numbers of United States troops to assist the Liberal regime by temporarily occupying certain island forts.[22]

Evidence was accumulating that Maximilian and his European troops would soon be gone from Mexico,[23] but it stood no chance of general acceptance in Washington. Such was the degree of trust now accorded Louis Napoleon that his promise to evacuate Mexico would be believed on the day when the last French soldier took ship at Vera Cruz.

At this juncture Sheridan's headquarters came into possession of a copy of a coded telegram to Napoleon from Bazaine and Castelnau. The message had left Mexico City by courier on December 3 and had been delivered to the French Consulate at New Orleans, from where it was telegraphed to Paris on the 9th. As will be explained below, there is every reason to believe that this message went unread by United States cryptographers. The possession of its contents would have been of great value, for the message (as translated from the version given by Castelnau's biographer) said:

[21] Seward's instructions to Campbell, dated October 25, 1866, are perhaps the most impressive of the numerous masterful documents produced by the Secretary in the Mexican affair. Grant was the President's first selection as the military member of the mission and was excused only after a number of urgent requests. Correspondence relating to the inception of the Sherman-Campbell mission includes: Andrew Johnson to E. M. Stanton, October 26 and 30; Grant to Sherman (at St. Louis), October 20 and 22; Grant to Johnson, October 20 and 21, and Grant to Stanton, October 27.

[22] Sherman to Grant, November 3, 1866 (Sherman MSS, Library of Congress); Grant to Sheridan, November 4, 1866. Sheridan was directed to "comply with any request as to location of troops in your department that Lt. Gen. Sherman . . . may make."

[23] Campbell to Seward, November 21, 1866; unaddressed, unsigned military intelligence report dated at Washington, November 18.

New Orleans, 9 Dec 1866

To His Majesty the Emperor Napoleon at Paris.
Mexico, 3rd December.

Emperor Maximilian appears to wish to remain in Mexico, but we must not count on it. Since the evacuation is to be completed in March, it is urgent that the transports arrive. We think that the foreign regiment must also be embarked. As for the French officers and soldiers attached to the Mexican Corps, can they be allowed the option of returning?

The country is restless. The Campbell and Sherman mission, which arrived off Vera Cruz on November 29 and left December 3, seems disposed to a peaceful solution. Nevertheless it gives moral support to the Juaristsists through the statement of the Federal government.

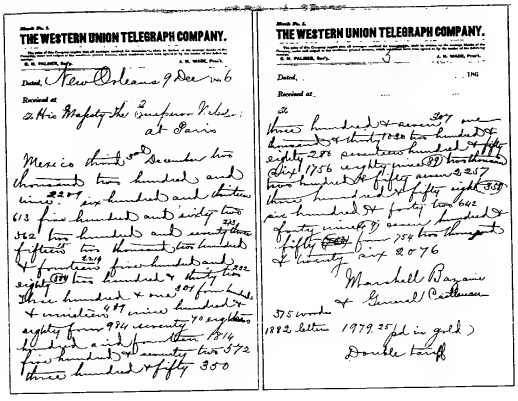
Marshal Bazaine and General Castelnau [24]

As December wore on, rumblings from Capitol Hill indicated that Congress — the same Congress that was even then moving to impeach President Johnson — might attempt to take the management of the entire affair out of the Administration's hands. Word arrived from Bigelow that transports to bring the army home were ready to sail from French ports, but that information would by no means be convincing enough to reassure Washington. And that word was the last to be heard from Bigelow, as competent a reporter as he was a diplomatist. He was relieved as Minister by John Adams Dix, ex-senator, ex-general, who did not manage to turn his hand to report-writing until mid-February, after the crisis was past.[25]

Similarly, nothing that would clarify the situation was coming out of Mexico. General Grant received a report from Sherman, at Vera Cruz, containing two items of intelligence, highly significant and completely contradictory: two ships, waiting at Vera Cruz to take Maximilian home, had been loaded with tremendous quantities of royal baggage; and the Emperor had just issued a proclamation to the Mexican people announcing

[24] Girard, *op. cit.*, pp. 117–18.

[25] *New York Herald*, December 7, 1866, p. 4, col. 3; Bigelow to Seward, November 30, 1866; Morgan Dix, *Memoirs of John Adams Dix* (2 vols., New York, 1883), II, 150; Dix to Seward, December 24, 1866.


THE WESTERN UNION TELEGRAPH COMPANY.

Dated, New Orleans 9 Dec 66

Received at

To His Majesty the Emperor Napoleon at Paris

Mexico 3rd December

THE WESTERN UNION TELEGRAPH COMPANY.

Dated, 186

Received at

To

Marshall Bazaine & General Castelnau

375 words

1882 letter 1979.25 (all in gold)

Double tariff

First and last pages of the five-page message to Napoleon III from his commanders in Mexico, reporting on the situation there and asking instructions concerning the evacuation of the European forces. The French clear-text version, as repeated by General Castelnau in a letter to Napoleon on December 8, 1866 (and quoted by Castelnau's biographer), reads:

L'empereur Maximilien paraît vouloir rester au Mexique, mais on ne peut y compter. L'évacuation devant être terminée en mars, il est urgent que les transports arrivent. Nous pensons que le régiment étranger doit être aussi embarqué. Quant aux officiers et soldats français détachés aux corps mexicains, peut-on leur laisser la faculté de revenir? Le pays est inquiet. La mission Campbell et Sherman arrivée devant Vera Cruz le 29 novembre et partie le 3 décembre semble disposée à une solution pacifique. Elle n'en donne pas moins un appui moral aux Juaristes par la déclaration du gouvernement fédéral.

his intention to remain. Sherman and Campbell were facng a dilemma, in that they could not reach Juárez without crossing territory held by the Imperialists, with whom they were supposed to have nothing to do. Sherman invited Grant to instruct him to go to Mexico City to see Bazaine, who, he was sure, would tell him the truth about French intentions, but nothing came of this suggestion. Wrote the general of the colorful pen and the fervid dislike of politics: "I am as anxious to find Juarez as Japhet was to find his father, that I may dispose of this mission." [26]

Tension mounted in Washington early in January as the Senate prepared for a debate on the Mexican question, and a wide variety of reports circulated, the most ominous being that half of the French forces were to remain in Mexico through the summer, and that Assistant Secretary of State Frederick W. Seward, who had sailed mysteriously from Annapolis on Christmas day, was on his way to see Napoleon. (He was en route to the West Indies on one of his father's projects for the purchase of territory.) [27] But on January 12, before the Senate got around to the Mexican question, the War Department received a message from Sheridan at New Orleans transmitting the following telegram:

Paris Jany 10th

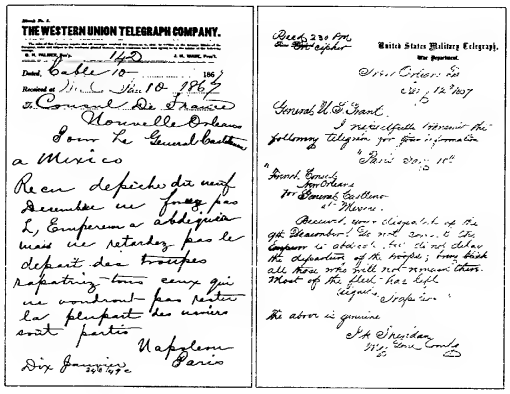
French Consul New Orleans
for General Cast[elnau] at Mexico.

Received your dispatch of the ninth December. Do not compel the Emperor to abdicate, but do not delay the departure of the troops; bring back all those who will not remain there. Most of the fleet has left.

NAPOLEON.

[26] Sherman to Grant, December 1 and 7, 1866. Sherman, despite his reputation for hard-headedness, was not one of those who favored military action by the United States in Mexico. He wrote Grant, "I feel as bitter as you do about this meddling of Napoleon, but we can bide our time and not punish ourselves by picking up a burden [the French] can't afford to carry."

[27] *New York Herald*, January 3, 1867; New York *Evening Post*, January 8, 1867; Frederick W. Seward, *Reminiscences of a War-time Statesman and Diplomat* (New York and London, 1916), pp. 348–55. Seward's project, a very closely kept secret, was the acquisition of a harbor in San Domingo. A treaty was later concluded but buried by the Senate.


THE WESTERN UNION TELEGRAPH COMPANY.

Dated Cable 10 1867
Received at Washington Jan 10 1867
From Consul De France
Nouvelle Orleans
Pour le General Castelnau
a Mexico
Recu depeche du neuf
December me prescrivant de
L, Empereur n'abdiquer
mais me retirer avec le
depart des troupes
rapatrier tous ceux qui
ne voudront pas rester
les plus part des navires
sont partis
Napoleon
Paris
Dix Janvier 1867

Recd 230 PM
By Telegraph
United States Military Telegraph.
War Department.
New Orleans La
Jan 12 1867
General U. S. Grant.
I respectfully transmit the following Telegram for your information
Paris Jany 10th
French Consul
New Orleans
For General Castelnau
at Mexico.
Received your dispatch of the 9th December. Do not compel the Emperor to abdicate, but do not delay the departure of the troops; bring back all those who will not remain there. Most of the fleet has left.
Napoleon
Paris
The above is genuine
P. H. Sheridan
Maj Gen Comdg

Napoleon III's "Bring the army home" message, and the one by which General Sheridan transmitted it in translation to General Grant. The notation on the Sheridan-to-Grant message "Recd 230 PM In cipher" refers to its receipt and decipherment in the War Department, and so does not bear on Sheridan's later assertion that Napoleon's message was sent in cipher.

The phrase "will not remain there" was a translation error. It was corrected to "are not willing to remain" when Sheridan forwarded a confirmation copy of his telegram by mail later on January 12. "Most of the fleet has left" (referring to the departure of transports for Mexico) would have been better translated "Most of the ships have left."

Here now was a conclusive answer to both of the pressing questions, the French evacuation and Maximilian's future. The entire French force must be leaving; else there would scarcely be a question of compelling Maximilian to abdicate. And with the French gone, Maximilian, even if he remained firm in his decision to keep the throne, could hardly stand against the rising Liberals very long. The European threat to American soil could be considered virtually at an end.

How It Happened

Because of the historical importance attaching to the interception of this message and the Mexico-to-Paris message of a month earlier, the circumstances surrounding the interception are worth examining.

The two telegrams owed their existence to the successful installation of the Atlantic cable a few months before. The cable's own history went back to August 1857, when the first attempt to lay it ended in failure. A year later a connection was completed and the cable was operated for eleven weeks before it went dead, apparently because the use of a very high voltage had broken down the insulation. Renewal of the attempt awaited the development of better electrical techniques and the end of the Civil War. In 1865 a new cable was laid from Valentia, Ireland, but was lost six hundred miles short of Newfoundland. Another was started July 13, 1866, and brought ashore at Heart's Content, Newfoundland, on July 27. The ill-starred steamer *Great Eastern*, which laid it, then picked up the buried end of the 1865 cable and ran a second line to Newfoundland. Service to the public opened August 26.[28]

Thus Napoleon's September message to Bazaine passed after the permanent operation of a telegraph line across the Atlantic had been a reality for only a few weeks, and it must be conceded that the United States was reasonably prompt in availing itself of this source of intelligence — despite Napoleon's opinion to the contrary.

[28] Robert Luther Thompson, *Wiring a Continent* (Princeton, 1947), pp. 299–301, 319–20, 323, 433–34; S. A. Garnham and Robert L. Hadfield, *The Submarine Cable* (London, 1934), pp. 19–40. The cable laying was the only success in the long career of the leviathan *Great Eastern*, which bankrupted a succession of owners as a passenger and cargo ship, as an exhibition ship, and finally as a gigantic dismantling and salvage operation. Its history is told by James Dugan in *The Great Iron Ship* (New York, 1953).

Although the first interception took place only a month after the French Emperor had virtually invited this government to read his mail, it appears that Napoleon's suggestion had nothing to do with it. The author of the intercept scheme, in all probability, was General Sheridan, and it is highly unlikely that Napoleon's remarks would have been communicated to him. In any case, no instructions for surveillance of the telegraph lines to obtain French messages appear in the correspondence to the Gulf Department from Army Headquarters.[29]

Years later Sheridan explained how the job was done: his telegraph operator and cipher clerk, Charles A. Keefer, one of the numerous Canadians who entered the Union and Confederate telegraph services, had succeeded in "getting possession of the telegraph and managing [a] secret line,"[30] which presumably connected his office with the Western Union wires in New Orleans.

Keefer's "secret line" may not have been so remarkable a thing as Sheridan's cryptic account makes it seem, for there was a high degree of integration between the Military Telegraph system to which Keefer belonged and the commercial system over which the messages passed. Throughout the occupied areas of the South during and after the Civil War, the Military Telegraph service took over commercial and railroad telegraph facilities wherever they existed. These Military Telegraph offices accepted commercial as well as government business, and commercial offices of course sent and received thousands of military telegrams; many a telegraph circuit had a military office at one terminus and a commercial office at the other.

As the Reconstruction period advanced, this integration became even closer; when the wires were returned to the use of the companies that owned them, Military Telegraph officers remained on duty to take care of government business and exercise a loose kind of supervision over the commercial opera-

[29] Correspondence from August 1 to December 10, 1866, has been examined for evidence of such instructions. Sheridan's papers in the Library of Congress appear to be incomplete for this period.

[30] Unaddressed official statement signed by Sheridan December 8, 1877 (sic). William R. Plum, *The Military Telegraph During the Civil War in the United States* (2 vols., Chicago, 1882), II, pp. 343 and 357, is authority for the information on Keefer's nationality.

tions. At some places military and commercial operators worked side by side. The fact that Keefer's copies of the French telegrams were written on Western Union message blanks makes it appear that New Orleans was one of the cities where this arrangement was in effect. If it was not, and the Military Telegraph and Western Union offices there were located separately, they were nevertheless using the same wires for communication with distant points, which would have made it comparatively easy for Keefer to connect a "secret line."

This integration of operations went all the way to the top of the two telegraph systems. General Thomas T. Eckert, who had been the second-ranking member and active head of the Military Telegraph service, continued to be closely connected with it after becoming Assistant Secretary of War in 1866. In the period now under study Eckert was apparently occupying his War Department position and at the same time resuming his activities in the industry as Eastern Division superintendent for Western Union at New York.[31]

Sheridan also credited Keefer with having solved the French "cipher," [32] but there is strong evidence to the contrary:

(1) The amount of material Keefer could have had to work with was very small. The cable in its early years was used sparingly because of the very high tolls (note the $1,979.25 charge, in gold, that the French Consulate paid for the December 3/9 message). Thus Paris was still awaiting word from Castelnau at the end of November,[33] although he had been in Mexico nearly two months. The only French messages referred to in any of the documents examined in the present study are the clear-text message that Napoleon said he sent Bazaine in September,[34] the message of December 3/9, and the message of January 10. Accordingly, as the January message (to be discussed in detail below) was almost certainly sent in the clear,

[31] Plum, *op. cit.*, II, pp. 345–48. The War Department records for 1866 and 1867 contain frequent cipher telegrams to Secretary Stanton from Eckert in New York; some of these messages bear dates subsequent to Eckert's resignation from the Deparment.

[32] From Sheridan's statement of December 8, 1877, and his *Memoirs*, vol. II, p. 226.

[33] Bigelow to Seward, November 30, 1866.

[34] This message has not been found by the writer in either French or United States records available in Washington.

it is highly probable that the December 3/9 message from Bazaine and Castelnau to Napoleon was the only encrypted French telegram that passed between Mexico and France during the entire period of the French intervention.[35] It is extremely unlikely that the code — for the message was in code and not cipher — could have been solved from this one message of eighty-eight groups.

(2) An examination of all available United States records that could reasonably be expected to contain such an item (if it existed) fails to uncover a decrypted version of the December 3/9 message or any other evidence that the government during the ensuing weeks had come into possession of the information it contained.[36]

Somewhat surprising is the apparent fact that Sheridan did not send the message to the War Department cryptographers for study. On several occasions during the Civil War, these men had been able to read enemy messages referred to them. This experience (so far as it is recorded) was, however, limited to the solution of certain ciphers (some of which were relatively complex for that day),[37] and the French code would have presented them with a strange and much more difficult problem. Union cryptographers at New Orleans had also once solved a captured message,[38] a fact which may have induced Sheridan to rely on his own headquarters' capability and not turn to Washington.

[35] This message and the French version of the January 10 message are filed in the National Archives with telegrams sent from the military headquarters at New Orleans during the years 1864–69. This filing is clearly in error, for the messages are foreign to the rest of the material in this file and they bear none of the marks that an operator would have placed on them had he transmitted them. War Department and Army Headquarters records do not show their receipt.

[36] Besides the government records cited elsewhere, the following collections have been searched for such evidence: the Andrew Johnson MSS, Sheridan MSS, Grant MSS, Edwin M. Stanton MSS, all in the Manuscripts Division, Library of Congress, and the contemporary correspondence between the War Department and State Department in the National Archives. Despite the extreme improbability that the message contents were obtained by solving the French code, this search took account of the possibility that the developments reported in the message were learned by other means.

It was the January 10 message from Napoleon, the only message mentioned in Sheridan's account of this episode, that the general said Keefer had solved. But there is every reason to believe that the French clear-text of this message is the message as received in New Orleans, and not a decoded version of that message. Note:

(1) The message heading. It is filled out in precisely the way that was standard procedure in telegraphic reception at that period. A considerably different format was used for the delivery of plain-text versions of friendly messages received in cipher, and since Keefer was also a Military Telegraph cipher clerk, he would probably have used that format or a similar one in writing up the plain text of a foreign cipher or code message. (This format is illustrated by the photostat of the deciphered version of Sheridan's January 12 message, of which Napoleon's message of the 10th was a part.)

(2) The difficulties that the copyist had with French spellings (Castelnau, *décembre, forcez, abdiquer, navires*). These are the difficulties of a telegraph operator receiving in a strange language. A cryptographer in writing up a decoded message would scarcely have made so many false strokes and misspellings; and with such a poor knowledge of the French language, he could scarcely have solved a coded message in French.

In addition to the above evidence, there is the extreme unlikelihood that this message added to the earlier one would have given Keefer enough material to have solved the code. There is also reason to believe, from Napoleon's statement to Bigelow regarding the message he sent Bazaine in September,

[37] The Confederates used two kinds of cipher, both involving the substitution of one character for another. What appears to be a representative if not a complete account of the cryptanalytic experiences of the Washington cryptographers is given by David Homer Bates, *Lincoln in the Telegraph Office* (New York, 1907), pp. 66–85. Bates was in the War Department telegraph and cipher office throughout the Civil War. The infrequency of such activity was plainly the result of the difficulty in obtaining intercepts (except at the front, where the traffic intercepted was almost always visual). All the cryptanalytic episodes reported by Bates involved intercepted courier and mail dispatches rather than messages obtained by wiretapping.

[38] Plum, *op. cit.*, I, pp. 36–39.

that political considerations might well have induced the Emperor to send this message through the United States in the clear.

Impact and Epilogue

Rare indeed is the single intelligence item that is at once so important and so unmistakable in meaning as the intercept of January 10. Its effect on events, however, can only be estimated, for no reference to it appears in the records of the developments that followed.

On the 17th the French Minister came to Seward proposing that France and the United States enter into an agreement for the governing of Mexico during the period that would follow the departure of the French troops. France's only stipulation was that the interim government exclude Juárez. The United States, having consistently pursued a policy of recognition of Juárez and nonrecognition of Maximilian, could never have voluntarily accepted such a proposal. And since southern Texas was well garrisoned with troops remaining from the magnificent army that had subdued the Confederacy, involuntary acceptance was likewise out of the question. But Seward might reasonably have entertained the proposal and then engaged in time-consuming negotiations, awaiting news from Mexico that the French were gone. Instead, he dismissed Napoleon's Minister with little ceremony; [39] his firmness probably stemmed largely from knowledge that the French withdrawal was already well advanced and the Emperor's proposal could be only an effort to save face.

The effect that Sheridan's communications intelligence enterprise had on international affairs, then, was probably this: it did not induce a change in policy or any other positive action, but it materially helped the government ride out a dangerous situation simply by sitting tight.

The Administration's domestic position, however, was as weak as its international position was strong. When the Senate on the 15th got around to its foreign policy debate, an earnest effort was made to embarrass the Administration (although the threatened attempt to take foreign policy out of

[39] Seward to Minister Berthemy, January 21, 1865 (memorandum of conversation of January 17).

its hands did not materialize). The debate continued into the 16th, when Senator Charles Sumner, chairman of the Foreign Relations Committee, saw fit to announce that he had reliable information (including a copy of a dispatch to the State Department from the United States Consul at Vera Cruz) that the French were withdrawing. That ended the matter.[40] Neither Seward nor the President seems to have said anything to counter the unfriendly speechmaking, having in Sumner a more direct means of silencing the opposition. Although the senator was no friend of the Administration, at least some of its intelligence information had been given to him for that purpose. From the conviction with which Sumner addressed his colleagues, one is tempted to believe that intelligence much more sensitive — and more convincing — than the consular dispatch had been confided to him.

Seward's ability to close out the Mexican affair with firmness and surehandedness must have substantially bolstered the Presidential prestige, which in that year was at the lowest ebb it has reached in the nation's history. Had the government's resistance to the French intervention been anything but a resounding success, Andrew Johnson might well have failed to muster the one-vote margin by which the impeachment proceedings against him were defeated.

Before January ended, the intelligence conveyed by Napoleon's cablegram was supported by details of the French withdrawal received from other sources, one of them an unnamed spy who was sent by Sheridan to the Vera Cruz area and returned with convincing evidence of preparations for the embarkation of the Army.[41] Bazaine led the last remnants of the French force out of Mexico City on February 5. Two weeks later embarkation had begun at Vera Cruz, and by March 11 it was complete.

Maximilian's regime quickly collapsed. He foolishly bottled up his small army of Mexicans, Austrians, and Belgians in Querétaro, a hundred miles northwest of the capital. An agent

[40] *Congressional Globe,* January 16, 1867.

[41] Sheridan to J. A. Rawlins (Chief of Staff to Grant), January 4, 1867. The ordinary period for transmittal of mail would have caused this dispatch to arrive in Washington perhaps a week later than the January 10 telegram from Paris via New Orleans.

of Sheridan, with this army by permission, late in February reported the Imperialists marching out of Querétaro and driving the enemy before them, but the offensive was shortlived. Soon Maximilian was back in Querétaro under siege, and on May 19, as a result of treachery by a Mexican Imperialist officer related by marriage to Bazaine, the garrison was captured.[42]

Seward had literally "scolded Napoleon out of Mexico," but if the final issue of *l'affaire Maximilien* was a triumph for American diplomacy, the fate of the unhappy sovereign himself was a sorry story of nonperformance of duty by an American diplomat. After Sherman had been excused from further participation in the mission, Minister Campbell stationed himself at New Orleans and determinedly resisted repeated efforts by Seward to get him into Mexico. In April, when it had become plain that the siege of Querétaro would end in the capture of Maximilian, Seward sent an urgent plea for Maximilian's life, instructing Campbell to find Juárez and deliver the message in person. It was delivered to the head of the Mexican government not by Campbell, ex-colonel, ex-senator, but by James White, sergeant. Such pleas delivered later on by a diplomatic Chief of Mission were heeded, but this one was of no avail, and Maximilian lost his life before a firing squad at Querétaro on June 19, 1867. Four days earlier, too late to affect the fate of the misguided prince, Seward had given Campbell a new title: ex-Minister.[43]

[42] Martin, *op. cit.*, 295–97; unsigned letter to Sheridan from his agent in Querétaro, February 26.

[43] *New York Herald*, December 7, 1866; Seward to Campbell, December 25, 1866, January 2, 8, 23, April 6, June 1, 5, 8, 11, 15, 1867; Campbell to Seward, December 24, 1866, January 2, 7, February 9, March 12, and June 3, 6, 10, 15, and 16, 1867; Martin, *op. cit.*, pp. 408, 411; Sheridan, *op. cit.*, II, p. 227.

COMMUNICATION TO THE EDITORS

Dear Sirs:

I should like to comment critically on Lewis R. Long's article, "Concepts for a Philosophy of Air Intelligence," that appeared in *Studies in Intelligence*, vol. 2, no. 1, pp. 31–50. Air intelligence is a subject with which I can claim some familiarity. In World War II, I served as Chief of the Target Intelligence Division in a combat Air Force headquarters, as commanding officer of an OSS-type organization that provided intelligence to air units for close support of ground forces, and as Chief of the Intelligence Division of Theater G–2 Section.

Colonel Long advocates a greatly expanded mission for air intelligence, one that far exceeds the requirements of the air commander because it includes areas where the air commander has no assigned decision-making or operational competence. The article builds up its case from the proposition (p. 40) that "air intelligence must encompass all aspects of power in foreign nations." By "encompass," the author means that the Air Force command must, in effect, have its own estimates of "all aspects of power in foreign nations (political, economic and psychological as well as military)," prepared by its own experts on the basis of information collected through its own operations (including covert operations), and that the Air Force should act offensively through political, economic and psychological warfare, both in cold and hot war situations, presumably deriving its inspiration for these activities from its own estimates. He also postulates as a proper function of air intelligence (p. 49) informing the American public "on a planned basis" about Soviet activities.

No one can argue that the air commander should be uninformed about "aspects of power in foreign nations," and all will agree that he must know everything possible about that part of the total enemy situation directly concerned with his assigned operational mission. However, the assigned mission does not impinge directly on all aspects of the enemy situation, but only on a discrete sector thereof. That his own people do not overtly and covertly collect and process intelligence on the aspects lying outside his assigned operational responsibilities

does not mean that the commander has to remain ignorant of the larger picture. He can draw on the intelligence community, where he is represented, for this information, and he need not duplicate existing facilities.

Colonel Long's contention that the air arm should engage in political, economic and psychological warfare in hot and cold war situations is hard to take seriously. One could equally well argue that Treasury and Commerce, having operational responsibilities relating to the economies of Communist countries, should have their own air photo recon organization for Communist country overflights to get the information on industrial establishments that they need to meet their responsibilities. For the air arm to engage in these three activities would mean duplicating facilities already in existence and in use, and it would mean going far beyond the assigned Air Force mission, assuming roles already allocated and assigned to other agencies of the government.

Colonel Long supports his claim for greatly expanded responsibilities for air intelligence by an appeal to Clausewitz' statement that war is an extension of policy by other means, and by the argument that the Marxists have shown how "the line of demarcation between politics and military action is extremely nebulous." He says that the Air Force "will have to carry the brunt of any initial contacts with the enemy," and "seek out and destroy all aspects of warmaking potential and will to fight." Even were these truisms, it would not logically follow that air intelligence should be what he would have it. Indeed the only logical justification for his position would have to come from a demonstration that the Air Force is the paramount element in the executive branch of the Government, with all other elements, including the office of the Chief Executive, subordinate to it. In this situation the air command would need an intelligence service such as that described.

In conclusion, air intelligence is a very difficult business to do well. I suspect that Colonel Long himself knows that there has always been more to it than the concentration on (p. 41) "strengths and weaknesses of foreign air forces" which he postulates as the alternative to his expanded role. Even at its highest stage of development in WW II—witness, for example, the incredibly bad intelligence preparation for the XXth Bomber Command strikes on Yawata and Anshan—there was

always room for great improvement. I submit that air intelligence has enough to do to support the air commander in his assigned responsibilities without seeking to encompass the responsibilities of other organizations.

Yours truly,
R. A. RANDOM

Articles and book reviews on the following pages are printed without classification and without identification of the writers, for the convenience of readers who may wish to detach them from the classified body of the *Studies*.

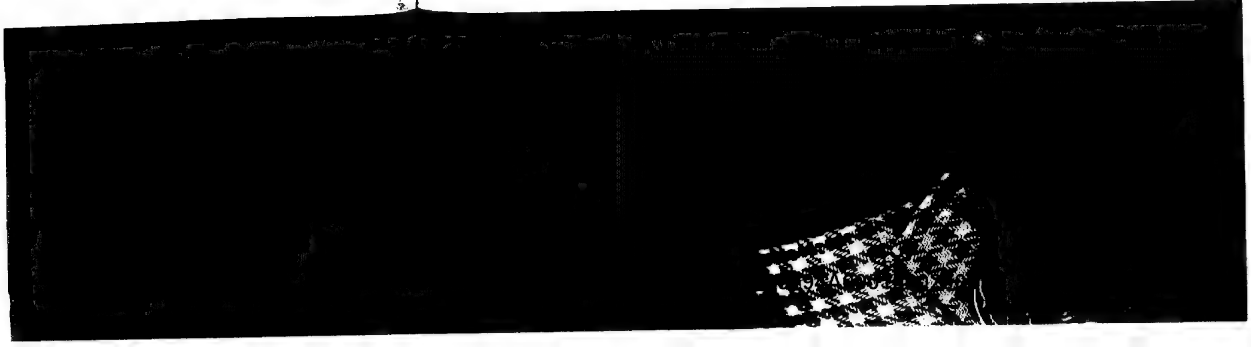
MILITARY INTELLIGENCE BEHIND ENEMY LINES

The history of intelligence activities during World War II includes many chapters on adventures and accomplishments in the German-occupied countries, but nothing to equal in scale and in organization the systematic intelligence collection effort carried out in Poland under the direction of the Home Army's Intelligence Division. Before describing this effort let us recall the circumstances in which Poland then found herself and the conditions under which the intelligence service was organized.

On 1 September 1939, without declaration of war, Hitler fell upon Poland and from the first day, even the first hour, carried out a ruthless bombing of the whole country, destroying cities and railway stations and even villages and the columns of refugees on the roads. On the seventeenth day of this campaign the Red Army invaded, seizing almost one-third of Poland. German-Russian cooperation was established by the Ribbentrop-Molotov pact of 23 September 1939. After the defeat inflicted by these two great neighboring powers with which she had firm non-aggression pacts, Poland lay stunned and despairing; in the course of her thousand-year history she had survived defeats and partitions, but never on the scale of these in 1939. Yet on the other hand her people were now stronger in number, more conscious of themselves as a nation, and impassioned in their love of country.

What had happened to their fatherland they felt above all as a terrible betrayal, and it is not strange that hatred for the aggressors, particularly the Germans, swelled high in the hearts of all Poles. As early as the fall of 1939 it was apparent that both occupying powers intended to use ruthless measures aimed at the destruction of Poland as a nation. Their first victims were the scientists, university professors, writers, engineers, and political and social leaders. From the Soviet zone Polish residents were deported in mass, under miserable conditions.

The remaining population, including those who escaped from imprisonment, began to organize themselves into an army, primarily for purposes of self-defense. The new organization developed rapidly in central Poland, more slowly on the pe-



ripheries. A central command was created, and then regional and lower commands, including a complement of personnel for collecting information and for maintaining contact among commands, the rudiments of an intelligence and liaison service.

This Polish service, like all such organizations everywhere, was a child of necessity: one had to know where the enemy was and in what strength, what he was doing and intending to do, whether his forces were increasing or diminishing, what dispositions he was making of his men. Since the enemy was in almost every big city, the need for gathering information about him automatically embraced the whole country. This information was utilized immediately by the local secret military authorities and was then transmitted to the highest echelons of command.

The emigre Polish government, located at first in France, moved after the fall of France in the summer of 1940 to London, where it remained to the end of the war, joining forces with the rest of the free world in its struggle with the totalitarian powers. When the home organization crystallized, the emigre government was able to assign it tasks of importance not only for Poland but for the whole allied camp, and its work got briskly under way, with even the lowliest of those employed in gathering information about the enemy aware of the value of their activity.

Positive Intelligence

Intelligence work has a long tradition, and its organization is no less an art than the art of strategy. But it was not after the pattern of classical models that this work was improvised in Poland. The circumstances were altogether exceptional, both extraordinarily hazardous and extraordinarily advantageous. The opportunities were clearly demonstrated when the Germans began to prepare their offensive against the USSR; this was evident to the Home Army intelligence service more than half a year before the attack which came on 22 June 1941. There are few cases in the history of warfare where an intelligence service directed against the enemy has been able to work from inside his military positions, at the very front, behind the front, and far to the rear deep in his homeland.

The Polish service was able to report daily to London on such German preparations as the building of airfields, the gradual

concentration of commands and divisions, and finally their mass movement forward. Before the attack on the USSR occurred, London had ready at hand a plan of the German order of battle, comprising over 100 divisions on the San, Bug and Narew rivers, whereon was marked the position not only of each division but even of the minor units of the huge concentration of forces which was to demolish the Soviet armies in the course of a few weeks' campaign. Never before had a military intelligence service spied out the enemy with tens of thousands of inspired agents, unpaid but devoted patriots, conscious of the purpose of their work.

Organizationally, the Polish service dispensed with the customary distinction between command organs and executive components. The Intelligence Division, constituting one element of the staff of the High Command, functioned less as directing organ for the country-wide network than as the center for correlation and evaluation of reports, transmission of information to London, and receipt of instructions from abroad. It had the following components:

Chief, with secretariat and communications unit;

Deputy;

Area intelligence units, such as for the German Reich, the eastern front, the seacoast and Baltic ports, and a mobile team for special missions;

Reports Center, subdivided into two sections, the Bureau for Military, Air and Naval Problems, and the Bureau for Economic Problems;

A Technical and Documentary Services Section;

A Finance Section, with a unit for the care of arrested personnel and the families of those killed.

For research on complex economic problems the service availed itself of scientists and experts in the various branches of industry who were loosely affiliated with the Bureau for Economic Problems. Such research was done to develop estimates on coal extraction, petroleum yields, synthetic gasoline production, progress in the construction and testing of the new secret weapons (V–1 and V–2), and similar intelligence problems.

Within the German Reich the mission of the service was not defined by geographical area, but concentrated on certain seaport and industrial objectives designated by higher authority.

For this purpose several dozen specialists in naval and air problems were sent from London. Poles were employed in the most variegated positions in many German establishments, ranging from railroads to business houses, and so had widespread opportunities for making observations. Reports often reached the intelligence center from several different sources at the same time, facilitating evaluation of the reliability of incoming material.

The required penetration of the North Sea ports met with a great deal of difficulty on account of the severe screening process the Germans used in taking on workers there and the alert activity of German counterintelligence. In this sector the work of the intelligence service was subject to frequent interruption. The Baltic ports, on the other hand, remained under uninterrupted control.

The rear areas of the eastern front were unevenly controlled. Only the Ukrainian sector was kept thoroughly in hand. In the whole stretch south from Polesia there was a regular agent network. Intelligence teams advanced in the wake of the German armies, reaching as far as the Volga and the Caucasus. The intelligence reports from this sector were complete and gave a clear picture of the state of the German ground and air forces and of their economic exploitation of occupied territory.

The Reports Center organized and correlated the information received, checked its validity by various methods, and prepared *ad hoc* and weekly reports. These reports sent abroad presented a synthesis of the current situation, particularly on the eastern front. Another important product of the intelligence activity were studies of the German tables of organization and equipment; these constituted a useful training aid for the Home Army.

After diplomatic relations were established between the Polish emigre government and the USSR and a Polish military mission had arrived in Moscow in 1941, the Soviet authorities proposed collaboration with the Polish intelligence services. The proposal envisioned direct transmission of information reports from Poland to the Soviet staff through the establishment of radio and air courier communications between Warsaw and the Soviet intelligence center. The Poles accepted only the proposed radio link. A Polish liaison post was thus actually established near Moscow on 2 April 1942, but for various

reasons it continued to function only until July 1942. This was the period when the Polish divisions which had been forming in the USSR were evacuated to Iran. One of the reasons why the collaboration was broken off was that the Russians did not give the Poles the certifications which they had promised.

Communications between Warsaw and London were maintained by radio and by courier. The most urgent reports on military, air, naval and economic subjects were transmitted coded by direct radio. The number of such reports reached 300 per month. Less urgent reports were forwarded, also enciphered, to the base in Budapest and relayed to bases in Switzerland and Sweden, whence they were transmitted by radio to London. Reports by courier were made once a month beginning in 1941; these were compendious, comprising the entirety of the elaborated information organized according to London's instructions. To each section were attached the pertinent original documents, such as construction blueprints or plans of industrial installations and airfields. These reports, amounting generally to some 200 typewritten pages with 100 pages of attachments, were microfilmed and packed in safe containers.

Certain Polish achievements had special significance for the general war effort. In the spring of 1943, for example, the home intelligence service received information that the Germans were carrying out tests of some new secret weapon at their experimental station in Peenemünde. London ordered the service to get a detailed plan of the station, and one was obtained within a couple of weeks. With this plan for guidance, the Royal Air Force was able to carry out on the night of 17–18 August 1943 a raid in which part of the station was destroyed and the Chief of Staff of the Luftwaffe, General Jeschonek, was killed along with several members of the experimental team. As a result the "V" rockets which were being tested at Peenemünde were several months late getting into operation.

In the spring of 1944 the Germans transferred their experimental activity to Polish soil. Rockets shot from launching ramps at the SS training camp in Blizna-Pustków near Mielec would at first hit widely scattered points over a range of several hundred kilometers. As the experiments progressed, however,

the hits became concentrated in the neighborhood of Sarnaka on the Bug, north of Wyszków. A special agent network established by the Polish service for that purpose kept each shot under observation, recording meteorological and ballistic data and other details of the operation. Other teams collected fragments and component parts of the rockets after they fell, getting there ahead of the German motorized patrols sent out to find the pieces. A commission of engineers, assembled in Warsaw for this sole purpose, undertook research on the characteristics of the new weapon. Its characteristics were reported immediately to London as they were identified; and later, after assembly of all the most important components of a rocket, when photographs and technical drawings of the fragments had been made, the whole thing was forwarded by air to London, together with the results of the commission's research.

The intelligence collection operations were conducted on Polish territory by the regional commands. The organization of the intelligence components of regional staffs was modeled on that given above for the Intelligence Division of the High Command. The agent networks, employing thousands of people in each region, were responsible to the regional commanders. The regional commands utilized the resulting information in formulating their own security and war plans in addition to forwarding it to the High Command for study of the enemy dispositions as a whole. The tasks of the service were to develop and report information on: a) the German garrisons, army and police, airfields, military stores, repair shops, army transport, equipment and materiel, with special attention to fuel supplies, along all communication routes to and from the front; b) the transfer of units, changes in their billeting, and the smallest particulars of their conduct; c) the operations of industry in every detail.

Agents of the service reported every observed change not only in the disposition of the German units but also in their daily life. The service took full advantage of the help of the civilian population unconnected with the military organization. In time, as resistance became the established attitude in the civilian community, people spontaneously reported the most minute observations in every sphere of activity. They automatically reinforced the network in areas made particularly important by events and in periods pregnant with military

developments like June 1941 and the time of the German retreat through Poland.

The results of the work created a detailed and frequently colorful picture of the situation; in particular, information on industry, more difficult to obtain than purely military information, was imposing in its breadth and precision. New orders and the time of starting new production led to inferences about the plans of the occupying power. The effects of each bombing on the production of the industrial establishment were reported, and the selection of future targets was made on the basis of these reports rather than on the evidence of air photographs at the time of bombardment, which told only a part of the story.

Counterintelligence Activities

If the organization of positive intelligence activities was a departure from classical forms, counterintelligence was even more exclusively based on its own ingenuity and the adaptation of its organization and work to local needs. It was never directed centrally from the top; initial attempts to form a country-wide organization modeled after the unit in the High Command turned out rather badly, and day-to-day practical activity demanded complete autonomy for regional counterintelligence units. There was mutual sharing of information only on Polish collaborators with the Gestapo.

This part of the work is more difficult than intelligence proper. It requires the employment of outstandingly intelligent people and the application of more highly perfected techniques; it requires individual enterprise and excellent internal liaison. In an enemy-occupied country counterintelligence can operate only when the whole mechanism of conspiratorial activity begins to operate flawlessly; and the construction and operation of such a mechanism cannot be treated in this article.

The effectiveness of the Polish counterintelligence can be measured by the security of the secret high political and military authorities in Warsaw, their capital. The Germans never succeeded in developing information on the Polish military organization, as witness Von dem Bach's testimony at the Nuremberg trials. Bach was the German commander during the two-month Battle of Warsaw, whose mission it was to destroy the Polish units in the uprising. Before he took over

the Warsaw command he had had access to the files of the German intelligence service. Yet he testified in 1945 that there was no single commander on the Polish side who could be considered his own opposite number. Thus he was in error not only at the time of the battle but even a year afterward; he had no idea whatever of the organization and deployment of the Polish forces. That is proof that the Polish counterintelligence effort against enemy penetration was above normal standards. The fact that the Germans were better acquainted with the command structure of the Home Army than with its Warsaw regional command, which prepared and directed the uprising, is a function of special circumstances.

The Germans likewise never succeeded, in the course of this battle or at any other time during their entire occupation of Polish soil, in getting the key to the Polish cipher. That is the only way they could have got information about the military organization and its functioning. Today, when the cards are long since all on the table, any assertion to the contrary would be invalid.

The mission of counterintelligence is simple to define; it is charged with learning in advance what measures are planned against the secret organization by the adversary, in this case the German secret police, security police, and military and administrative authorities. It often happened that this kind of information was derived from the questions the Germans put to persons arrested and imprisoned in the local jails; it could be obtained immediately after the prisoner was taken to his cell, and in the early period was the principal source of guidance for the Polish dispositions.

It must be emphasized in this connection that the secret organization was threatened not only by the danger of compromising its command structure, its leading personalities, its communications or the operations of its secret press, but by every shift and resettlement of area populations, which often ruptured its organizational links and threw to the winds the exertions of many months' work.

The regional counterintelligence organizations were made up of the following elements:

Directing organ, subordinate to the regional command;

Several observation groups working independently of each other;

A headquarters operation to correlate and evaluate the material sent in by the observation groups, to do research on German penetration techniques, and to supply material to the director of the Special Court;

Collaborators in the prisons;

A liaison unit;

An administrative unit; and

Groups for the liquidation of traitors.

The counterintelligence organization never effectively extended its work into the concentration camps and never got its people into the German secret police organs; it didn't have the financial resources to effect such penetrations. That does not mean, however, that it didn't get information, and valuable information, from these sources without the employment of regular agents there.

Next after the interrogation of arrested persons, the best source of counterintelligence information was developed in the off-duty hangouts of the Germans, their restaurants, coffee shops and private homes. The Germans were permitted to visit only the public places reserved *"Nur für Deutsche,"* and the Polish service had to introduce its own people into these places. It became customary there for the Germans to grow garrulous, certain that they were among their own people whom they could trust, and to talk openly about all kinds of things. Thus information was obtained about whom they might suspect under what pseudonym, whether and when they were planning "grabs,"[1] resettlements, or round-ups for work in the Reich, which public houses, districts and dwellings were under observation, and the like.

The Polish commanders also got from their counterintelligence workers data on the behavior of their own service personnel, on whether they were observing in every respect the carefully worked-out principles of conspiratorial activity. Violations such as garrulousness, frequenting public places, and

[1] The Germans staged mass raids in the larger cities and on the railroads; since other methods were unsuccessful they calculated that in these mass grabs some individuals active in the secret organizations would by the laws of probability fall into their hands. After each grab there was a cursory interrogation followed by a detailed one. Often individuals were released immediately.

group excursions of young people out of town were censured at hearings, and those so censured were demoted to the lowest ranks of the organization. Considering, however, that organization personnel were selected for their high patriotism and trustworthiness, counterintelligence had little work in this field; there was no question of continuing investigation or uncertainty about their moral caliber.

One sensitive segment of the Home Army's work required special precautions—the production of weapons like hand grenades, incendiary flares, automatic pistols, etc. Those who worked constantly in this sector usually began after a time to disregard security considerations, and it was necessary to put these places under counterintelligence protection in addition to the regular security guards assigned to all places where production or secret printing was going on.

In extreme cases of danger to the secret organization, when there was no other way to avoid losses, the commander would order an attack on the German units. Such attacks were carried out by combat units of the so-called diversionary forces held in constant readiness, well armed and thirsting for revenge.

If one may draw morals from this Polish story, there are three of them here. One, that it is possible to accomplish a great deal without money and under difficult conditions, if only some high purpose inspires those at work. Two, that collaboration with allies gives one the necessary confidence that he is contributing to a broad effective effort. Three, that resistance and intelligence activity take on significance proportionate to the sensitivity of their locale with respect to the enemy's military positions: Poland was more important than France in World War II in relation to German communications, the rear areas of the front, and staging for strategic action.

A NEGLECTED SOURCE OF EVIDENCE

The profound changes which have occurred in the Soviet Union in the five years since Stalin's death have been accompanied by many surprising events. It is useful to consider certain means by which Western observers might have reduced the element of surprise.

Some events, such as the arrest of Beria, happened so suddenly that they probably surprised important groups within the Soviet leadership. Sometimes the outcome of protracted conflicts among the leaders probably could not have been predicted long in advance even by the protagonists themselves. But frequently Western observers have learned of the *existence* of such conflicts only when Moscow announced their outcome. Such an instance was Malenkov's resignation as head of the government, in February 1955, and Khrushchev's nomination of Bulganin to succeed him. Need this event have caused astonishment? Were the Soviet leaders really able to stake their political careers, if not their lives, in factional struggle without leaving evident traces of their mutual opposition?

Actually there was clear evidence of the contention which issued in Malenkov's resignation, and other surprising events as well might have been anticipated by examining the traces left by the contending leaders. These traces lie principally in published texts whose surface meaning does not reveal their political significance. They are "esoteric communications," hidden messages, which enable factional leaders to communicate quickly, safely, and decisively with the sub-elites whose support they solicit.[1]

Serious students of the Soviet Union, aware that esoteric communications play some role in Soviet politics, scrutinize Soviet publications for hidden messages and try to elicit their meaning. On the other side, Soviet leaders and publicists employ their ingenuity to screen such messages from eyes for which they are not intended. That they have succeeded rather well is indicated by the surprise with which the world has greeted a number of events announced from Moscow.

[1] The role of esoteric communication in Soviet politics is discussed at some length in *The Rise of Khrushchev*, pp. 88–94.

An important reason for their success is that Western observers underestimate the refinement and subtlety of Soviet esoteric communications. Only the most obtrusive messages, designed for a wide Soviet audience, are generally noted. Let Beria not attend an opera with his Presidium colleagues and even our morning newspaper will ponder his fate. But let Khrushchev's party title of *pervi sekretar* (first secretary) become *Pervi sekretar*, and, though hundreds of copies of *Pravda* are read in the West for signs of Khrushchev's status, the change may go unnoticed.

The first impulse of one unaccustomed to take such minute variations seriously is revulsion as from a kind of talmudism. The Soviet politicians and publicists do engage in a kind of talmudism, probably not learned from studying the Talmud but absorbed from their political environment. The tradition of esoteric communication developed early in the Soviet regime, being a direct offspring of bolshevik practices in evading the czarist censorship. Malenkov, Kaganovich, and Molotov have been officially designated talmudists; Khrushchev, be it noted, deserves this epithet as much as they. So to be a talmudist is to be in good company if one's purpose is to understand Soviet politics. At any rate it is a fact, talmudic or not, that the Central Committee of the CPSU elected Khrushchev first secretary in 1953 and First secretary in 1956; and this fact must either be explained or accepted without interpretation.

Facts which are accepted without interpretation—especially seemingly trivial facts like the capitalization of an initial letter—have little value. They acquire value when they are explained, and only in the degree that the explanation has political significance. Besides, some facts are so egregious that they *demand* to be explained. And if one's business is the serious and difficult one of trying to analyze Soviet politics with insufficient facts, can one disregard so intriguing a fact as *Pravda*'s decision in 1955 to capitalize the initial letter in Khrushchev's party title?

In this case it is probably the enormity of the explanation which causes the student of the USSR to balk. The disproportion between the minuteness of the evidence—*p*ervi changed to *P*ervi—and the conclusion drawn from it in my book—that the change magnified the authority of the senior secretary—could hardly be greater. Yet one cannot reject the inference out of hand, since Khrushchev's authority rose appreciably in the months after *Pravda* introduced the change, in May 1955; and it is difficult to dismiss the symbolic change as trivial, since it was subsequently confirmed by an action of the Central Committee.[2]

One of my experiences as I was preparing material for *The Rise of Khrushchev* may illustrate why I take such apparently inconsequential changes seriously.

On November 3, 1955, the Soviet press published a telegram from a New Zealand official, Holyoake, which wrongly addressed Khrushchev by Stalin's title of "general secretary." Not Holyoake's mistake, but the Soviet publicity for it, suggested that Khrushchev might be making a bold bid for Stalin's old title, and therefore for the powers which had been associated with it. I decided to test this hypothesis by examining the evidence more closely, at the same time investigating the general proposition that minute symbolic changes bearing on sensitive political questions embody hidden messages, and can therefore be made to yield important evidence about the Soviet leadership. A few weeks of research led to a series of discoveries:

(1) When I examined Stalin's obituaries to see how they treated his famous title of general secretary, I was surprised to learn that they did not even mention it.

(2) Further investigation showed that Soviet newspapers had not mentioned the title of party general secretary once in the two-and-a-half years from Stalin's death until the Holyoake telegram.

(3) The articles on Stalin in Soviet reference works published since his death disagreed remarkably as to whether Stalin had remained general secretary until his death in 1953 or had abandoned the post in October, 1952.

[2] It is noteworthy that in discussing my book in the last issue of this journal the reviewer evades this difficulty through an inadvertence. In treating this evidence he grows inattentive and misrepresents the conclusion which was drawn from it. According to the review: "Initially [Khrushchev] was designated 'first secretary,' then 'First Secretary,' and finally 'First secretary,' all of this purportedly reflecting the ups and downs of his political fortunes." The book, however, does not infer ups and downs but only two rises in his power; the form First Secretary was used only twice, a few days apart.

(4) A few weeks after publication of the Holyoake telegram which initiated this research, the journal *Kommunist* mentioned, for the first time since Stalin's death, his incumbency as general secretary.

(5) Further attention to Khrushchev's official party title developed the minute fact which we have been using as an illustration, that just a few months previous to publication of the Holyoake telegram *Pravda* had changed Khrushchev's title by capitalizing its initial letter.

All of these discoveries, it will be noted, involve unobtrusive facts which are pregnant with political symbolism. They belong to a world of meaning which is largely closed to the ordinary reader of Soviet publications. To detect the most elusive of these symbolic facts a reader must anticipate them. He must expect to find something relevant to the object of his inquiry, although not necessarily the particular discovery which actually turns up. It follows that a Soviet specialist ought not simply to sit by the stream of Soviet communications and hope to fish out their hidden messages; he must cast into it at confluences where he believes a hidden message lies concealed. One is led to these confluences by reflection founded in knowledge of Soviet politics and an understanding of the current situation.

A pregnant symbolic fact may provide the stimulus to such reflection. One symbolic fact leads to another. That is why, when we stumble upon such a fact, we should not accept it uninterpreted, but ought to pursue its explanation. The first step in the pursuit, however, is not a frenzied search for more symbolic facts; it is rather to explain by means of a hypothesis the one we already have. Once the hypothesis is articulated, deductions can be drawn from it in order to test it. In order to form fruitful hypotheses and to make verifiable deductions from them, an assessment of the political situation is required.[3]

[3] Without making *some* assessment of the political situation it is logically impossible to draw any inference from symbolic evidence; one cannot draw *valid* inferences without taking account of the many complex factors which influence Soviet developments. It is an error, then, to suppose that there is a method (the reviewer chooses to call it "content analysis") which makes it possible for inferences to be developed independently from the symbols and then "placed side by side with inferences developed by other means."

To illustrate the process of reflection set off by a suggestive symbolic fact, let us return to the telegram addressing Khrushchev as general secretary. The hypothesis set up to explain its publication is that Khrushchev used Holyoake's error in his effort to acquire Stalin's old office and the powers associated with it. From this hypothesis one can deduce the following: (1) Stalin's famous office of party general secretary was probably a highly sensitive topic at the time of his death and afterward; (2) Khrushchev's title as the senior secretary in the party Secretariat must have been even more sensitive. These deductions suggest where to look for hidden messages as well as what kind to expect.

One test of the validity of a hypothesis is its capacity to bring the researcher to important new evidence. If the search resulting from these deductions had disclosed nothing of political import—if Stalin's title of general secretary had been treated after his death in the same way as before, and if Khrushchev's party title had not been tampered with—then the hypothesis from which they were derived would have become less credible. Instead, by leading to the discovery of important political facts, the hypothesis gained a measure of confirmation. These discoveries also lent credence to the general thesis under examination, that esoteric communications play a key role in Soviet politics.

Another, and in some ways a better, test of a hypothesis is whether subsequent events support it, and particularly whether predictions deduced from it are confirmed. The predictions deduced from my interpretation of the Holyoake telegram and related evidence were, in my opinion, largely substantiated by subsequent events, including some which have followed publication of *The Rise of Khrushchev*. Khrushchev's assumption of the premiership in March 1958, for example, provides further evidence of his boundless ambition and his continuing need for *authority* as well as power. Moreover, the manner in which he has chosen to juxtapose his party and government titles is congruent with his personal strategy as the book reconstructs it. While the previous joint holders of the top party and government posts, Stalin and Malenkov, were designated "Chairman of the Council of Ministers and Secretary of the Central Committee," Khrushchev has reversed the order. By thus subordinating his government to his party office he has

displayed his continuing concern to maintain the supremacy of the party apparatus. Again, his distinctive party title remains an important symbol of his special position: while Soviet publications usually referred to Stalin as "secretary," not "*general* secretary," they designate Khrushchev "*First* secretary."

The evidence that Soviet leaders commonly employ esoteric communications seems conclusive, however strange the practice may appear to Western observers. Men whose understanding of political reality has been formed by a free society find it difficult to suppose that piddling with stereotyped formulas can be an important mode of political behavior for powerful leaders. Even in default of the customary data used in political analysis, they are understandably reluctant to accept far-reaching conclusions drawn from this elusive evidence. Yet the fact remains: these minutiae—no less than purges and policy debates—are the very stuff of Soviet politics. The frequency of esoteric communications, and the ends served by them, may vary widely. But they will remain a necessary link between leaders and followers until such time as men are allowed to go openly into the Soviet political arena to seek support for their views. When politics, in this sense, ceases to be "anti-party" activity, the Soviet political system will have become something different from what Stalin made it, and what it remains today.

If esoteric communications play this vital role, then studying them should enable us to extend our knowledge of Soviet politics. Two questions arise in connection with such studies: what kinds of knowledge can they provide, and how should they be conducted?

The particular knowledge which can be obtained necessarily depends upon the content of the hidden messages which can be uncovered. In recent years, when factional conflict has permeated Soviet politics under cover of "collective leadership," hidden messages have chiefly served factional ends. But this has not always been true. In Stalin's last years, for example, although contending subordinate leaders used their limited access to publications for factional purposes, the most important esoteric communications were the dictator's programmatic pronouncements, which he delivered in an appropriately oracular style. Thus it should not be supposed that esoteric

communications can be made to yield conclusions only about dissension among the leaders: important information on other intelligence problems can also be derived from them.

Until now, Soviet specialists have for the most part limited their search for hidden messages to *current* Soviet publications, hoping to find there clues to future developments. However, the uses of esoteric communication in research are not limited to short-run predictions.[4] Retrospective examination of Soviet publications in the light of subsequent events frequently reveals hidden messages which eluded contemporary investigation. Such esoteric communications, when considered in the light of the events which they helped bring about, can enhance our understanding of the situation in which they appeared. By such means, for example, the use of key institutions as power bases by contending leaders during the Stalin succession crisis might be considerably illuminated.

The second question which arises regarding studies of esoteric communication is how they should be conducted. The researcher who makes extensive use of symbolic evidence adopts special procedures, develops uncommon skills, and accumulates abundant data. These can usefully be passed on to researchers who have had less experience in using such evidence. But such by-products of specialization should not be cultivated and exaggerated so as to produce a "methodology" to be set alongside other "methodologies." Esoteric communications are simply one kind of evidence to be woven in with other data in analyzing Soviet politics. The rigorous and exhaustive analysis of such minutiae can produce significant results only if the researcher maintains a broad political outlook and considers other relevant evidence in arriving at his conclusions.

If, as we have emphasized, an assessment of the political situation enters into every inference drawn from symbolic facts, how can an evaluator engaged in making a departmental or national estimate take such inferences into account unless he fully shares the specialist's estimate of the political situation? All that is required is that the specialist's inference be fitted into the evaluator's estimate of the political situation. This fitting-in may make necessary some modification of the

[4] An important historical study based on such evidence is *The Ritual of Liquidation*, by N. Leites and E. Bernaut.

evaluator's earlier views, and therein lies the specialist's contribution to finished intelligence. Few of our beliefs about the current Soviet political situation are so firmly based that they cannot benefit from new evidence.

To illustrate, imagine that a specialist skilled in the interpretation of symbolic evidence brings this Holyoake telegram to the generalist evaluator in December 1955. The specialist, having analyzed the telegram and related symbolic evidence in the light of his concept of Soviet politics and of the particular situation in late 1955, has concluded that Khrushchev is actively engaged in destroying the collective leadership. After being presented with this conclusion and with the argument on which it is based, the evaluator, who may believe that Khrushchev is satisfied to act simply as the spokesman for a collective leadership, must set these views against his own. He must then inquire into the grounds for his own belief: it has been reported that Khrushchev's colleagues show him no special deference in the presence of Western officials; Soviet propaganda extols collective leadership and criticizes the "cult of the individual"; Khrushchev lacks a dictator's bearing and self-control; and so forth.

Are these grounds adequate to maintain the view that Khrushchev's power and ambitions are no threat to collective leadership, despite the symbolic evidence which has been interpreted to support the opposite view? The evaluator may believe so; but he ought not simply to dismiss the symbolic facts which have been brought to his attention. If he rejects the specialist's explanation of them, he should try himself to provide an interpretation which is not inconsistent with his estimate of Khrushchev's political position. His explanation of the symbolic evidence must be a plausible one, as the specialist's is. If he is unable to develop such an interpretation, the evaluator should recognize that his estimate has become less credible. He must be prepared to alter it if subsequent events (e.g., Khrushchev's secret speech) cast fresh doubt upon it.

By this or some similar procedure the researches of "talmudists," as of Soviet specialists generally, can be more widely exploited by those who must estimate future political developments in the U.S.S.R. These researches can provide new evidence on important problems; they can bring plausible hypotheses to areas of admitted ignorance; they can raise provocative objections to views held uncritically. More generally, in minds which have not been closed to their influence, they can stimulate reflection about the very nature of the Soviet political system.

WE SPIED . . .

The past months have been rather lean ones for first-class books on intelligence, but we have spied out a few which certainly should be called to your attention.

Resistance

Two excellent books on the French Resistance during World War II and one on resistance in Italy have been added to the literature in this field. *The Story of the Italian Resistance,* by Roberto Battaglia, will be reviewed in a later issue of the *Studies.* Here we especially commend for good reading *They Fought Alone: The Story of British Agents in France,* by Maurice Buckmaster.[1] Col. Buckmaster, who headed the French section of the British Special Operations Executive, had already written one excellent book on S. O. E. activities in France,[2] and his new one is no less well done. *They Fought Alone* relates the activities of British S. O. E. agents dropped into France, describes their successes and their failures, and tells how they organized their nets. For the period after D-Day, it shows how countless German troops were immobilized by the activities of the S. O. E.-led Maquis, by sabotage, the destruction of bridges and rolling stock, and other means. With pride the author quotes General Eisenhower's affirmation that the operations of the S. O. E. and the Maquis had shortened the war in Europe by nine months. The book covers many aspects of tradecraft: personnel recruiting and training, communications, documentation, sabotage, escape and evasion, security. Col. Buckmaster can write on these topics with authority, and he writes interestingly and well.

Ten Thousand Eyes, by Richard Collier,[3] is devoted to the activities of those Resistance agent nets under the control of

[1] London: Odhams Press Ltd., 1958. 256 p. 18s

[2] *Specially Employed: The Story of British Aid to French Patriots of the Resistance.* London: The Batchworth Press, 1952. 200 p.

[3] London: Collins, 1958. 320 p. 18s. Also New York: E. P. Dutton & Co., 1958. 320 p. $4.00.

General de Gaulle's Free French Headquarters in London which were primarily engaged in securing intelligence on Hitler's Atlantic Wall from Cherbourg to Le Havre, where the D-Day landings were to be made. The author tells how in 1940 Capt. Andre Dewavrin escaped from France and joined General de Gaulle in London, where he established the Free French intelligence set-up and became known to the Resistance as Colonel Passy. For Colonel Passy's own story, one should refer to his three volumes of Souvenirs.[4]

Ten Thousand Eyes also gives the story of some of Dewavrin's liaison with Gilbert Renault-Roulier, known throughout the French Resistance as Rémy, who has described his own Resistance activities in five volumes, two of which have been translated into English.[5] Among the many tradecraft subjects treated in *Ten Thousand Eyes* are the establishment of agent nets, communications, air/maritime support of agent personnel, and escape and evasion. Primarily, however, the book deals with the clandestine collection of intelligence information on beach and inland defenses which was essential to the planners of the invasion and the invasion forces themselves. London needed this information in minute detail, and it was up to the Resistance to collect it. *Ten Thousand Eyes* tells how the members of the Resistance would sketch this information in on sector maps and pass it on to their cartographic service, run by an ex-mechanic in Caen. There the information was consolidated on master maps to be sent on to England. Spine-tingling stories of how this information was secured make the book a fascinating one.

Intelligence in Psychological Warfare

A Psychological Warfare Casebook, compiled by William E. Daugherty in collaboration with Morris Janowitz,[6] was published just in time for this column to review its intelligence aspects. Daugherty is an operations analyst with the Johns Hopkins Operations Research Office, which usually performs its functions under contract with the Department of the Army, and Dr. Janowitz is Associate Professor of Sociology at the University of Michigan. Both of them saw intelligence service during World War II. Their voluminous work — almost 900 pages — is exactly what its title implies, a casebook; the compiler/editors are introducing into the psychological warfare field the casebook method long used as a method of instruction in the law schools.

[4] *2e Bureau Londres.* Monte-Carlo: Raoul Solar, 1947. 236 p.
10, Duke Street Londres. Monte-Carlo: Raoul Solar, 1947. 387 p.
Missions Secrètes En France. Paris: Plon, 1951. 439 p.

[5] *Memoirs of a Secret Agent of Free France.* New York: McGraw-Hill, 1948. 406 p.
Courage and Fear. London: Arthur Barker Ltd., 1950. 320 p.

[6] Baltimore: The Johns Hopkins Press, 1958. 880 p. $12.50.

The editors define psychological warfare as "the *planned* use of *propaganda* and *other actions* designed to influence the opinions, emotions, attitudes, and behavior of enemy, neutral, and friendly foreign groups in such a way as to support the accomplishment of national aims and objectives." In addition to treating the policy, doctrine, organization, objectives, and methods of psychological warfare, they include chapters on the role of intelligence, research, and analysis, on evaluation of effectiveness, and on Soviet psychological warfare. At the end of each of the 10 chapters there are lists of references and additional collateral reading, constituting in aggregate an excellent basic psychological warfare bibliography. Each chapter consists of articles or extracts on its subject by various authors or by the editors themselves. The editors have been able to cull through many official files, and some of the material comes from unpublished manuscripts or reports. This work, which was several years in preparation, appears to be not only an indispensable tool for the beginner in psychological warfare and a good refresher and reference work for the expert, but also a source for the study of how intelligence impinges on this field. It does, however, have the shortcoming of being too much concerned with the military aspects of psychological warfare and slighting its non-military role in the cold war.

This reviewer believes that the casebook method has much to commend it for use in more than one field of intelligence. Some day such a casebook might well be published on aspects of the collection and production of intelligence and in such specialized fields as escape and evasion. A serious gap in intelligence literature would then be filled.

Brief Mention

Here are some other books on various aspects of intelligence which should be called briefly to your attention:

BROME, Vincent. *The Way Back.* New York: W. W. Norton & Co., 1958. 249 p. $3.75. Also London: Cassell & Co. Ltd., 1957. 267 p.

This is the story of Dr. Albert Guérisse, a doctor in the Belgian Army who escaped to England after the fall of France in 1940. Under the pseudonym of Pat O'Leary he was returned to the south of France to work for British intelligence, transporting out of Europe those British airmen who had been shot down and had evaded or escaped confinement.

BROWN, Ralph S., Jr. *Loyalty and Security: Employment Tests in the United States.* New Haven: Yale University Press, 1958. 524 p. $6.00.

Professor Brown here reviews the security programs for screening civil servants — federal, state, and local — as well as loyalty tests administered by private employers and labor unions, and recommends improvements. Although this is probably the best book to date on this subject by an author not connected with the government, it still lacks the objectivity and competence which characterized the 1956 report of the Special Committee on the Federal Loyalty-Security Program of the Association of the Bar of the City of New York [7] and the 1957 report of the President's Commission on Government Security.[8]

COWLES, Virginia. *The Phantom Major.* New York: Harper & Brothers, 1958. 320 p. $3.95. Also London: Collins, 1958.

Virginia Cowles was a war correspondent for the *London Sunday Times* who covered the North African campaign. This book tells the story of David Stirling and his Special Air Service unit which operated behind Rommel's lines in North Africa. Stirling was finally captured and imprisoned at Colditz.

[7] New York: Dodd, Mead, 1956. 301 p.

[8] Washington: U. S. Govt. Print. Off., 1957. 807 p.

25X1

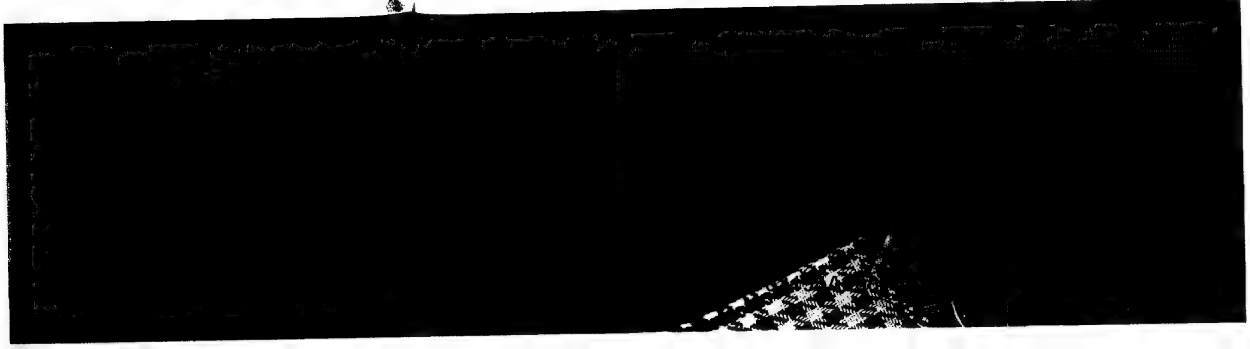
STUDIES in INTELLIGENCE

VOL. 2 NO. 4 FALL 1958

CENTRAL INTELLIGENCE AGENCY

OFFICE OF TRAINING

25X1



All opinions expressed in the *Studies* are those of the authors. They do not necessarily represent the official views of the Central Intelligence Agency, the Office of Training, or any other organizational component of the intelligence community.

WARNING

This material contains information affecting the National Defense of the United States within the meaning of the espionage laws, Title 18, USC, Secs. 793 and 794, the transmission or revelation of which to an unauthorized person is prohibited by law.

STUDIES IN INTELLIGENCE

EDITORIAL POLICY

Articles for the **Studies in Intelligence** *may be written on any theoretical, doctrinal, operational, or historical aspect of intelligence.*

The final responsibility for accepting or rejecting an article rests with the Editorial Board.

The criterion for publication is whether or not, in the opinion of the Board, the article makes a contribution to the literature of intelligence.

CONTRIBUTIONS AND DISTRIBUTION

Contributions to the *Studies* or communications to the editors may come from any member of the intelligence community or, upon invitation, from persons outside. Manuscripts should be submitted directly to the Editor, Studies in Intelligence, Room 2013 R & S Building [redacted] and need not be coordinated or submitted through channels. They should be typed in duplicate, double-spaced, the original on bond paper. Footnotes should be inserted in the body of the text following the line in which the reference occurs. Articles may be classified through *Secret*.

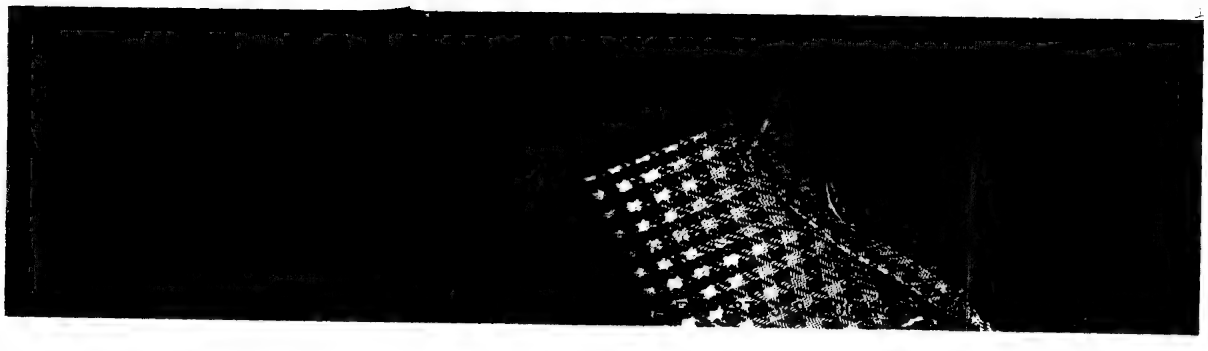
25X1

For inclusion on the regular *Studies* distribution list call your office dissemination center or the responsible OCR desk, [redacted] For back issues and on other questions call the Office of the Editor, [redacted]

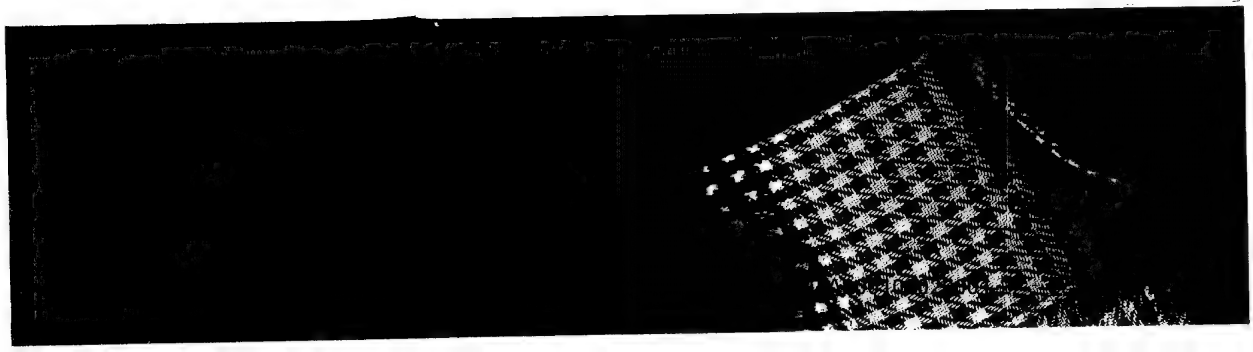
25X1

25X1

25X1



CONTENTS



UNCLASSIFIED ARTICLES

SECRET

CONTRIBUTORS TO THIS ISSUE

Joseph R. Strayer [redacted] 25X1

[redacted] 25X1

Louise D. Omandere is a specialist in scientific intelligence collection.

John Debevoise is one of the coordinators of the defector program.

Delmege Trimble is an officer of the CIA division charged with defector resettlement.

"Expatriate" is [redacted] 25X1

Lawrence R. Houston is CIA's General Counsel. 25X1

Martin T. Bimfort is a CIA research officer.

Captain Charles V. Cate is [redacted]

Keith M. Takerer is a specialist in the study of European counterespionage operations in the period between the two world wars.

Burney B. Bennett heads one of the faculties in CIA's Office of Training.

SECRET

An "ordinary citizen" appraises his participation in one "form of divination."

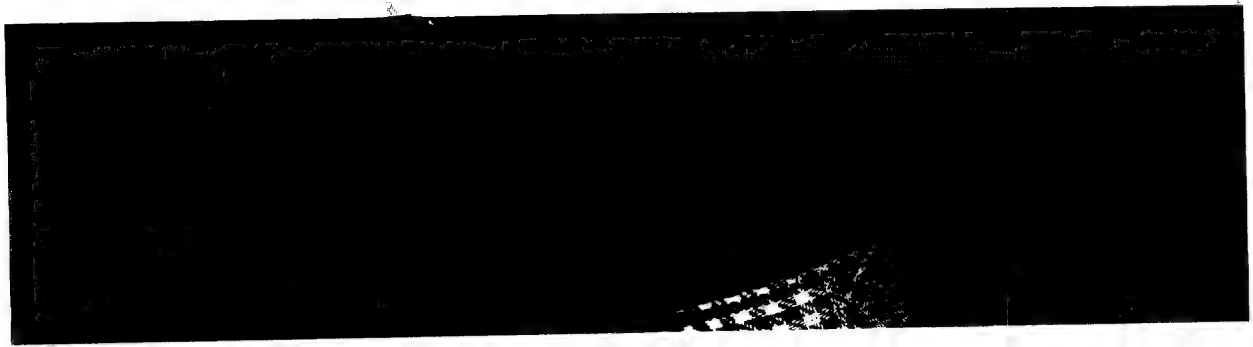
THE ROLE OF THE CONSULTANT IN INTELLIGENCE ESTIMATES

Joseph R. Strayer

Most consultants, at one time or another in their careers, wonder what excuse there is for their existence. They do not have continuing access to all the sources of information available to the intelligence community. They can spend only a few hours in pondering the significance of events which require days or weeks for proper analysis. Yet they are asked for advice about the most complicated problems and are expected to give their opinion on five minutes' notice. They wonder if the ritual of consultation has any more value than other forms of divination. They fear that they often seem naive and ignorant and they know that they can correct these deficiencies only by using up the time of intelligence officers who presumably have something better to do.

These feelings of guilt are made worse by the fact that the work is interesting and enjoyable. The problems are important, even if the consultant's opinion is not. However ignorant the consultant may be at the start of his career, he will find himself enlightened during his period of service. The intelligence community has not solved all its problems of style and organization but it usually succeeds in presenting essential facts in a clear, logical and compact form. There is no better way to get an education in world affairs than to act as a consultant. But these benefits only deepen the consultant's doubts. What does he give one-half so precious as what he receives?

For some kinds of consultant the answer is fairly easy. These are the men who have dined with dictators or haggled with desert sheikhs, who understand the mysteries of international finance or the intricacies of oriental politics. Such men have specialized knowledge and technical proficiency, they add to the pool of information and skill available to the intelligence



community instead of draining it. The need for this type of consultant is too obvious to require explanation; intelligence can always use expert knowledge of little-known areas or of highly technical problems.

But even these experts are often consulted on matters in which they have no special competence, and intelligence often recruits consultants who are not experts at all. They are ordinary, well-informed citizens, with some interest in foreign affairs. What special knowledge they may have is usually confined to Europe, an area on which practically everyone in Washington is an expert. It is to be hoped that they also have good sense and good judgment, but these qualities are certainly at least as common in the intelligence community as in any group of outsiders. What can such men contribute to the intelligence effort?

Since I belong to this group of consultants which has no particularly valuable expertise, my answer to this question may be somewhat self-serving. As far as I can see, the chief value of these consultants lies precisely in their lack of special knowledge. If nothing else, this makes them fairly representative of a large number of the consumers of intelligence products. Any text-book writer knows that it is fatal to ask an expert whether a particular chapter is clear and meaningful. Either he will read all his own knowledge into it and pass over loose organization and glaring omissions, or he will quarrel with every generalization and load it with unnecessary detail. The best critic of the first draft of a text-book is an intelligent person who has only a sophomore's knowledge of the field. In the same way, the best critic of an intelligence paper is probably the consultant who has only a general knowledge of the topic. If he misinterprets a key passage, if he is not convinced by the reasoning, if he feels that some essential information has been omitted, then the chances are that several consumers will have the same reactions.

For example, consultants have sometimes been troubled by the indiscriminate use of the terms "left" or "leftist." Since "leftist" can mean anything from a man who believes in universal suffrage to an ardent supporter of Communism it does not help very much to be told that the cabinet of country X has "four leftist members." Consultants have also been critical of the use of technical phrases in places where non-technical

language would be just as effective. Why say "has optimum capability" when all that is meant is "works best"? The war against vagueness and jargon must be fought by all members of the intelligence community, but consultants can sometimes be used as shock troops in the struggle.

Lack of precision is not the only reason why a paper may fail to be convincing. Sometimes the argument seems too precise, it places too much weight on logic and reasonableness. Consultants may not be expert but they have usually had enough experience to realize that human beings seldom solve their problems in a completely logical and sensible way. A nice example of this clash of logic and experience occurred a few years ago when the French Assembly was debating the ratification of the ill-fated EDC agreements. The first draft of a paper shown to a group of consultants predicted with some confidence that the agreements would be ratified. The arguments for this belief were strong. They were based on intensive investigation of the attitude of the government and the deputies and they were presented with impeccable logic. But some consultants distrusted the underlying assumption that the deputies would be reasonable and follow a policy of enlightened self-interest. They argued that these qualities are rare in any political group and especially in a French political group. Their opposition may have helped to make the final draft of the paper much less certain about ratification, even though it still leaned to the wrong side.

Criticism of style and logic is an essentially negative function. The consultant can also make some positive contributions. He should not hesitate to ask obvious and even silly questions. The greatest danger in intelligence work, as indeed in all intellectual activity, is that of falling into a repetitive routine. We all know of cases in which judgments have been repeated year after year simply because they were once sanctioned by the highest authority. It does no harm to reexamine what seems obvious or to question long-established generalizations. It was, I believe, a consultant who first queried the standard passage about the USSR being unwilling to conclude an Austrian State Treaty. It was another consultant who cast doubt on the cliché that Mohammedanism and Communism are fundamentally incompatible. On the other hand, certain consultants were demonstrably wrong when

they urged that there was a real possibility that the USSR would withdraw from East Germany in return for a neutralization of the reunited country. But their question at least forced the intelligence community to examine with greater care its basic assumptions about Soviet policy in Germany and so in the end to have greater confidence in its estimate that the USSR considered it essential to retain its hold on East Germany.

Most important of all, the consultant, simply because he stands a little farther away from the trees, can sometimes see the first signs of the storms which will destroy certain portions of the forest. The intelligence community, like any other group, must assume that there will be a certain amount of continuity in the phenomena with which it deals. If it did not do so, it could not function. If precedents mean nothing, if what a statesman does today has no bearing on what he does tomorrow, then it becomes impossible to make estimates. Some of the most valuable intelligence papers ever written — those projecting the future economic growth of the USSR — were based on the assumption that existing trends would continue. But, granting all this, quantum jumps do occur in human affairs. Sudden changes can overthrow precedents and distort trends. It is hard for anyone to foresee such changes; it is particularly hard for men who have spent years watching a certain pattern of conduct emerge and apparently stabilize itself. The worst failures of intelligence in recent years have been caused by this inability to anticipate the possibility of drastic change.

I am not suggesting that greater reliance on consultants could have prevented many, or indeed any, of these failures. Like most educated men, consultants tend to overestimate the element of continuity. But sometimes consultants do not know very well what it is that is supposed to continue. Because they have fewer old facts in their minds they are more receptive to the scattered new facts which indicate that a change is coming. I can remember two incidents which illustrate this point. The first came after the death of Stalin. Certainly no one could then have predicted the exact nature of the changes which would occur. But there was a tendency on the part of some members of the intelligence community to deny that *any* change would take place. Certain consultants, on the other hand — mostly those who knew little about the Soviet

Union — felt that drastic change was inevitable, that no one but Stalin could continue Stalin's system. Their arguments may have been weak, but their hunch was right. A little more willingness to look for signs of change in the months following Stalin's death might have prevented some poor estimates.

The other case was more recent. When the Gaillard government fell in France early this year, the generally accepted opinion was that this was merely another episode in the lamentable history of the Fourth Republic. Another weak government would be formed, which would limp along until replaced by an even weaker successor. Some consultants, however, felt that this was the last straw, that the French would no longer tolerate a system which made them politically impotent. In spite of their counsel, the possibility of a Gaullist regime was still being denied by some elements of the intelligence community almost up to the moment when de Gaulle took power.

One final moral: on both occasions the consultants deferred to the greater knowledge of the experts whom they were advising and did not press their point of view very strongly. This was an abnegation of their proper function. Dissent leads to questioning of established opinion, and only through questioning established opinion can we arrive at the imperfect knowledge which is all that intelligence can ever attain.

Next 7 Page(s) In Document Exempt

Approved For Release 2005/03/15 : CIA-RDP78T03194A000100020001-2

The purloiner of scientific secrets pleads for patience, partnership, and better guidance.

THE COVERT COLLECTION OF SCIENTIFIC INFORMATION

Louise D. Omandere

This country, which has for over a hundred years led the world in technical development, is confronted by the very real possibility — some say probability — of falling behind in the scientific and technical race, and most dramatically in the contest for supremacy in space — in rockets and missiles, in earth satellite vehicles and manned space platforms, the emergent key elements of the power position of great nations. At this critical juncture it behooves this community to look to its performance in the field of scientific intelligence, to ask whether we are giving it sufficient emphasis, to review its processes and address ourselves to its problems.

This article is addressed to one aspect of scientific intelligence, perhaps its least prominent one, the clandestine collection of scientific and technical information. But covert collection cannot be considered in isolation from collection as a whole, nor collection in isolation from reporting, analysis and production; and we shall touch on all of these.

Pin-pointing the Covert Requirement

Let us begin with the first question the collector asks: "What shall I collect?" (Not *how*, but *what*. *How* is the second step.) Whence comes the answer to this question? Essentially from the analyst; the collector cannot determine which data among those available are critical and must be collected at no matter what risk unless he is informed by the man who day after day analyzes all available material in his particular field. The collector must rely on the analyst to direct him, and to a certain degree his success depends upon the aptness and precision of the requirements he is called upon to fill.

Particularly is this true in the field of scientific intelligence where frequently minute scientific data are crucial. A requirement which asks, "Tell us all you know about such-and-such a

target or about research in such-and-such a field," is not calculated to develop the kind of intelligence information the analyst really needs. The intelligence officer running a scientific collection operation is no better equipped with this requirement than he was without it. Yet this is the type of requirement he most commonly receives.

Suppose, for example, that a field intelligence officer is running an operation against a target which comprises institutes in all the major basic sciences and in their military applications — a technical institute. (Lest it be assumed that such a target be purely hypothetical, it should be stated that there are several of this kind presently confronting the collector. One of them has, in addition to its general administrative set-up, the following military Divisions: Engineering, Artillery, Signal, Anti-Aircraft Artillery, Planning, and Experimental. It also has technical units as follows: War Technical Institute, Biology Department, Bacteriological Technical Unit, Meteorology Technical Unit, Security, Chemical Department, Textile and Material Laboratories, Radar and Radio Laboratories, Signal Corps Research and Storage, Explosives and Pyrotechnic Laboratory, and one unit the function of which is not known.) Faced with the necessity to collect information on such a target, where does the covert collector begin if he is armed only with a requirement for "all information available on the Target"?

Because such an institute would be vital to the scientific potential of the country in which it was located, its activities would be shrouded in secrecy. Even so, it would be next to impossible for some information on it not to get into semi-overt and overt channels. For example, if the institute were located in a city where service attachés are posted — and most of these institutes are so located — the attachés could undoubtedly report in some detail on the location, physical description, and physical security of the target. Except in highly classified military fields, there would probably also be local press releases concerning scientific developments at the institute.

More important is the wealth of information overtly derivable from the publications of any institute's staff. The amount of intelligence information on classified subjects obtainable by analysis of overt literature was recently put to the test by a highly sensitive U.S. installation which maintains rigid security

precautions. As an experiment, a scientist well qualified in one of the specialties of the installation but without knowledge of its work or that of its subcontractors was engaged to study the overt publications of personnel at the installation. Although classified research cannot be published and all publications of the installation's staff must be cleared by the appropriate scientific and military authorities, this expert was able after studying the overt material which he found on his own in the Library of Congress to determine the entire program of that installation, including its most highly classified aspects. With one minor exception, he reconstructed its total research, development and production program.

It is true that Americans in defense work are allowed to publish more freely than their Soviet Bloc counterparts. But even in Iron Curtain countries the complete muzzling of scientists has been found impossible. Restrictions on the publication of scientific information have been considerably relaxed in the Soviet Bloc since 1955, and particularly within the last two years, in recognition of the fact that science flourishes or dies to the degree that the exchange of ideas among scientists is encouraged or constricted, and in deference to scientists' need to publish in order to establish nationally and internationally their professional reputation.

Information on much of the work of our secret target's scientific staff would thus be readily available to the U.S. intelligence community through the Library of Congress, the Department of Commerce, and the community's own program for exploitation of foreign documents. Moreover, scientists from this target would inevitably be allowed to attend international congresses in their fields of specialty, and would probably be permitted to present scientific papers at such congresses. The exploitation of these congresses through the multiple machinery of overt collection would furnish additional information on scientific developments at the institute.

Asking the covert collector for "all available information" on this target, then, is asking him to collect information which can be gathered by the analyst from overt and semi-overt sources to which he has ready access. A thorough analysis of these overt data would limit the areas which required covert coverage and enable the clandestine collector to concentrate his efforts on the really covert aspects of the target. Only the

consumer can thus collate and analyze the overtly available information and levy a resultant meaningful requirement upon the collector.

We see, then, that the first step of collection — the What — rests in the hands of the analyst, and that only a sound, detailed and exclusively covert requirement will yield maximum results in the clandestine collection of information. Analysis of all the information at hand — overt, semi-overt and covert — and the levying of well-founded requirements to fill in its gaps constitute the first and basic step in the process of collection. Let us turn now to the next step in the process — the How.

The Man and His Methods

The covert collection of scientific information is fraught with many difficulties, more than any other field of intelligence. Special knowledge is required to understand the meaning of data in this field. The information most desperately needed by the scientific intelligence community is hidden deep within the folds of Soviet security in areas almost totally inaccessible to ordinary covert operations. In addition, certain highly critical scientific work can be carried on under the nose of the collector without the slightest risk of detection; biological warfare research is an example of such work. (BW is in fact the best form of do-it-yourself warfare. Enough pathogenic material can be manufactured in a camp kitchen in forty-eight hours to incapacitate a tremendous military installation. Dissemination of the material can be easily handled by one person who can drive through or even around the installation.)

The key individual in covert collection is the field intelligence officer, the "case officer" responsible for handling the agent — for contacting him, for maintaining the critically important rapport with him, for giving him instructions on what to do and how to do it, and for eliciting information from him according to prescribed requirements. The case officer is dependent upon his headquarters components, both in the field and in Washington, for support in maintaining the necessary relationships with his agent, for the formulation of information requirements tailored to the specific capability and location of the agent.

In some fields of intelligence — the political, economic and even military — the case officer with operational experience and an informed knowledge of current events can, if necessary, formulate his own requirements when he is unable to obtain them from the consumer. If, for example, he is suddenly faced with an opportunity to debrief an important source of information on military plans and does not have time to cable for requirements, he can do a creditable job on his own and develop most of the required information. In the scientific field, however, this is not possible. Unless he is a highly qualified scientist in precisely the same field as his agent-scientist, he cannot debrief him without appropriate requirements received from the consumer. A case officer trained in physics, for example, would be ignorant of the field of microbiology. Without appropriate requirements, tailored specifically for the microbiologist, he would be as helpless as the case officer who specialized in political or counterespionage operations. And even if he is a scientist in the proper field, he still needs statements of requirements in order to keep abreast of the changing gaps in substantive intelligence while conducting operations in the field.

The case officer is a species of its own, possessing generalist abilities and specialist skills. It is a rare scientist who has all the qualifications of a good case officer, and an even rarer one who has them and is also willing to forsake his scientific career for an anonymous one in intelligence. The ideal scientific and technical case officer is this rare individual. It is therefore usually necessary, in selecting a scientific case officer, to make a foregone choice between these two sets of qualifications, those of the case officer and those of the scientist: the former are indispensable to a successful operation in any field, including the scientific. A good case officer, with appropriate training and good requirements, can conduct a very successful operation in the scientific and technical field. A good scientist who is not adaptable to operations cannot.

Faced with the shortage of the ideal scientific case officer and the resultant necessity of using a layman, the collector must first overcome the difficulty caused by the layman's reluctance to deal with scientific material. An excellent case officer may shrink from a scientific operation simply because the language is totally foreign to him. In the political or even

economic field he is on familiar ground and is confident that if necessary he can fend for himself, but in the scientific field he feels lost. He cannot evaluate what he hears, and without guidance he does not know whether he has new and critical information, old and unwanted data, or mere fabrication. He also frequently feels at a great disadvantage in talking to his agent, who is highly learned in subjects of which he is himself totally ignorant and the basic principles of which he cannot understand. This reluctance to undertake scientific operations can be overcome by giving the case officer basic training in scientific principles and terminology and by interesting him in the importance of scientific and technical information.

We have said that the really critical scientific information needed by the United States is almost completely hidden in impregnable installations deep within the Soviet Union. Yet the collection of much-needed scientific intelligence information is not completely impossible. If we work at the primary targets from the periphery, we have a reasonable chance of success, of obtaining enough critical information to enable us at least to make educated guesses which may come satisfyingly close to an accurate estimate.

One of the potentially most fruitful sources of scientific intelligence information is the scientific congress. An international scientific congress or conference is the mecca of every scientist, and Soviet and Satellite scientists are attending these conferences in increasing numbers. Over one thousand such conferences, congresses, symposia and colloquia are held every year, providing for a substantial amount of intercourse among scientists of all nationalities. Many of the same scientists attend meetings of the same group held yearly or biennially.

In considering the scientific congress from the intelligence viewpoint, a clear distinction must be made between the congress as a source of positive information and as an operational arena. The positive information the congress yields is almost invariably overt. The scientific papers, the open floor discussions and the small seminar sessions are all easily covered through overt sources. Thus there is little need to expend the efforts of the clandestine collector at a scientific congress merely to collect positive intelligence information.

As an operational arena, however, the congress can hardly be surpassed. For one thing, scientists of all nationalities, Bloc

and non-Bloc, can meet on common ground, in an atmosphere as free of political tension as can be found in present-day circumstances. For another, it is possible for the same scientist to reestablish, time after time, contact with his counterpart from behind the Curtain without being conspicuous in so doing. He can meet his counterparts not only on the conference floor and in closed sessions, but on social occasions as well. Particularly for Western scientists who have appropriate language qualifications, social intercourse with their Satellite colleagues is common and easily arranged. Through attendance at periodically recurring conferences, it is possible for Western scientists to meet their Satellite counterparts year after year, and it has become standard practice to correspond between meetings and to exchange reprints.

Over a period of time, sufficient rapport can often be established between Eastern and Western participants at these congresses to provide the basis for a clandestine operation, beginning, for example, with the introduction of a case officer to the target scientist for the purpose of recruitment. Once a Soviet Bloc scientist has agreed to work for the West, there will be little difficulty in maintaining subsequent communications. For, if the operation has been handled professionally and securely, the recruited scientist will within six months to a year be attending another conference, where he can be securely debriefed and rebriefed. Thus there is no necessity to attempt to lay on an elaborate secret writing method or code, which at best can yield only fragments of information and which is fraught with operational and security hazards. In short, what can be achieved through operations at international conferences is in fact penetrations of target installations within Bloc areas.

The greatest success so far achieved through this means has been the recruitment of Satellite scientists who travel to the USSR, sometimes for periodic short visits and occasionally for extended study or work, who can report on their observations and work within the Soviet Union when next they attend a conference in the West.

Inept or non-professional elicitation of Bloc scientists, however, has resulted in the discovery of these efforts by the opposition and the resultant loss of potentially valuable assets. Within recent months, the East German Government has an-

nounced in the press that GDR scientists would not be allowed to attend scientific congresses in West Germany because such congresses were so widely exploited by American intelligence. Thus, in order for the United States to derive maximum benefit from conference exploitation, our efforts in this field, both overt and covert, must be handled professionally and securely. These efforts and their security can be fortified by thorough coordination among the intelligence elements concerned. If the intelligence activity at scientific conferences were disclosed to Soviet intelligence, Soviet attendance at such conferences in the future would undoubtedly be curtailed and perhaps altogether prohibited. In that event a profitable long-range potential for covert collection of scientific information would disappear.

But if the program outlined above can be prosecuted in a well-planned manner for a period of time, the eventual penetration of the more important targets within the Soviet Union through scientists who have agreed to report on their activities becomes a realistic possibility.

Legal travelers are another source of scientific intelligence information. Western scientists have been allowed to tour wide areas of the Soviet Union and with the trained eye of the scientist can observe and report in accurate detail on the installations visited. While no really critical target can be adequately covered in this manner, still information of value which will contribute to the overall picture of Soviet scientific potential can be gathered. On a limited scale, Western scientists have been permitted to visit Soviet scientists in their homes. This enables the Westerner to collect information on the habits and attitudes of the Soviet scientist in his home atmosphere, his family attachments, hobbies and other characteristics, information which helps headquarters assess the scientist's potential with a view to future operations.

Even non-scientific legal travelers can be of considerable assistance when furnished simple collection techniques which can be applied with complete security, are non-compromising if discovered, but at the same time yield valuable and even critical scientific data. Such collection techniques can also be given to resident agents, legal or illegal travelers, and even couriers. While elaborate gadgetry and large black boxes are limited in their application to field operations, other more

simple techniques with a wide variety of applications can be used without considerable risk to the agent. Great caution should be exercised in the employment of any such techniques in order to avoid an exposure which would render them useless in the future, but properly handled they have a real potential for developing answers to presently unanswerable questions.

The inside spies are recruited from the discontented officials of the enemy.—Sun Tzu, *c.* 500 B.C.

SOVIET DEFECTOR MOTIVATION

John Debevoise

On the eve of the new year 1954, toward midnight, a chauffeur-driven Mercedes-Benz stopped midway on one of the Danube bridges in Vienna. A bulky, rather well-dressed individual with the wide bell-bottom trousers Soviet officials wear stepped out, dismissed the car, went to the rail, and was immediately lost in the chill fog which rose from the river. As the New Year dawned, headlines in Viennese newspapers announced that Soviet citizen Gregoriy Ryapolov had drowned himself in the Danube; his overcoat and jacket had been found near the bridge railing. He had been Director General of AEG Union, a USIA (Administration of Soviet Property in Austria) firm.

While the Viennese were reading this latest scandal of the Soviet occupation, Ryapolov himself was en route by air to the Defector Reception Center near Frankfurt am Main, accompanied by an American case officer. He had been "induced" to defect. His well-staged suicide had been planned in detail by his Austrian mistress, who accompanied him to freedom, and an American officer in touch with her. As planned, he was picked up by these two in another car after leaving a few articles of clothing on the bridge to indicate his suicide.

Transgressors in Trouble

In the early stages of Ryapolov's interrogation it became apparent that his defection was not ideologically motivated. He had been receptive to an inducement pitch only because he was in deep trouble: a whole shipment of AEG Union generators sent to the USSR had been found defective, and Ryapolov, as the head of the firm, was being investigated. His panic was the decisive "inducement." Ryapolov's case is illustrative generally of the entire defector inducement problem. A Soviet citizen usually has to be mired deep in difficulties before he will even consider defection. You *hear* of "ideological defectors," but when you deal with Soviets you seldom meet one.

Readers for whom inducement is a word charged with the hint of shadowy adventure deserve at this point a description of the routine process in its ordinary milieu. Every evening when the ice begins to melt in diplomatic cocktails around the world, a parallel thaw occurs in the ostensible personal relations between the assembled representatives of the USSR and Western diplomats. In this atmosphere of amiability take place the skirmishes of reconnaissance patrols in the great game of inducement — the probing of those charged with discovering which among the company is susceptible to subversion in some way or other for the purposes of the subverter.

The objective of the game for the players on both sides is ultimately to develop relations, if possible, to such a point of confidence that a private meeting can be held to discuss one or the other of two actions — recruitment in place or outright defection. Measured in terms of defections to the West from among the ranks of Soviet diplomacy, the results of these inducement attempts can, after more than a decade, be charitably described as slim. We seem to be successful only when, as with Ryapolov, our probings discover a human soul in terror, facing retribution for previous misdoings.

It can in fact be taken as a general rule that for Soviets a grievous transgression of one kind or another must precede and through anxiety precipitate defection. There have been all told quite a number of Soviet defections in various parts of the world since 1951, when record-keeping began and the U.S. defector program was formulated in NSCID 13 (now NSCID 4). Ivan Karpovich Permyakov, a Soviet Army private who defected on 18 April 1951, was the first to be handled under this Directive at the newly opened Defector Reception Center in Germany, 15 kilometers outside Frankfurt am Main. Since then 87 Soviet citizens have passed through the DRC, and elsewhere 60 others have defected to the West. Their motives have been varied, but uniformly they have been in trouble and needed to flee impending exposure or punishment for misdoing. The ancient impulse to migrate, to leave one land and settle in another in hope of better fortune, the old urge that emptied Europe of its malcontents and filled America, is not powerful enough at mid-twentieth-century to propel a Soviet citizen beyond his country's borders.

The getting out, for the vast bulk of residents of the USSR, is too difficult to permit thought of any kind of emigration. But there are factors beyond those of border guards, distance, and lack of means which act to deter defection. One of these is a complex of fears. A prospective defector has to consider what will happen to him if his attempt at defection fails. There are stiff penalties for attempting to leave the control of the authorities without their permission; what is simple emigration in the West is treason in the Communist system. The fear of failure and for self is broadened by the Soviet law that permits reprisals against blood relatives as penalty for defection. A Soviet citizen traveling or stationed in the West usually leaves some member of his family behind in the USSR. Such a person is, in blunt language, a hostage against whom reprisals may be taken if the Soviet defects. Not much is known of the extent to which this legal sanction is invoked, but its existence is undoubtedly a real deterrent.

Then most Soviets, even Muscovites, are provincial in the world sense. They have a fear of the unknown West that surpasses by far the 19th century U.S. country bumpkin's suspicions of the big city, a fear officially nurtured by indoctrination. They have been told that if they were to seek asylum in the West they would fall into the hands of imperialist intelligence officers who would wring information from them as juice is squeezed from an orange, and when their usefulness had ceased they would be cast back upon Soviet mercies, much as the rind of an orange is cast aside when the juice is gone.

The potential defector's doubts about his future in the West must be aggravated by the successes of the Soviet repatriation campaign and by the stories of some of the returnees concerning their treatment abroad. A "Committee for Return to the Homeland" in East Berlin carries on an aggressive campaign to encourage Soviets all over the world to return to the USSR. Many, many have taken advantage of this Committee's offer and have gone back. Many more will do so. Quite a few of these repatriates, coming from refugee centers in Europe, had constituted the hard core of the resettlement problem in that they were unacceptable outside the camps because of disease or mental instability. Others, coming from Central or South America, had never quite melded into a social structure which by and large is lacking a suitable middle class. You are either

a landlord or a peon in many parts of Latin America, and a [redacted] Germany of the Soviets resettled there never got used to their status as "white Indians." They were easily persuaded to repatriate, their fares paid all the way. No one seems to know precisely the reaction these returnees are producing within the USSR, but their presence by the hundreds all over the Soviet Union is certain to act as a deterrent to defection.

These universal physical and psychological barriers to defection are supplemented by certain specific influences, equally powerful, which act on particular groups. These further deterrents fall into two categories, those affecting the military and those applying to civilians.

Military Defections

Loyalty of the Soviet soldier to his oath and to his superiors acted as one of the gravest of his deterrents during ten years following the war when parts of the Soviet Army were in Austria, East Germany and East Berlin, contiguous to the borders of the free world. The strength of this loyalty was best illustrated in Vienna, where there were no barriers between occupation zones and access was open to all without hindrance. From the time early in 1951 when DRC was established until the withdrawal of Soviet troops from Austria in 1955 there were only 11 Soviet military defections in this area. This paucity of defection in relation to the number of Soviets who had the opportunity was explained away at the time by reasoning that Soviet personnel in Austria were already enjoying living conditions and social arrangements far better than they had known at home, and therefore had no need to defect. It was said that the Soviet soldier "had never had it so good." The test would come, said the experts, if and when there was ever a pull-out of the Soviet Armed Forces from Austria.

With the signing of the Austrian State Treaty came the long-awaited pull-out during the summer of 1955. Despite the fact (reported by a Soviet defector who had been a civilian employee of the Soviet Forces in Vienna) that no special precautions were taken to prevent defections from the withdrawing forces, Western preparations to receive the expected defector flood were wasted. Despite the lack of fences and guarded borders, despite the thousands of forbidden ties Soviet troops enjoyed with Austrian *Fraeulein*, despite substantial inducement efforts

of all kinds, not a single Soviet soldier requested asylum. The Soviet Army decamped [redacted] thousands. There were rumors that some of them had remained behind, but none ever appeared in defector channels. What was considered a riddle at that time appears in retrospect merely to illustrate the loyalty the Soviet has to his authorities and his homeland.

Although loyalty is thus apparently the strongest factor opposing defection among the largest group of Soviets ever allowed outside the USSR, some Soviet soldiers and officers have defected and others probably will. Since 1951, 11 Soviet officers and 33 enlisted men have deserted to the West. Only three of these, however, were more or less "ideologically motivated." Aleksander Smirnov, a re-enlisted sergeant, fell in love with one of the German girls employed by U.S. intelligence in an inducement project. She persuaded him to desert and delivered him into U.S. hands in Berlin in September 1954. Before that, a Junior Sergeant named Vladimir Vasil'yevich Murav'yev was persuaded to defect in place by the Gehlen Amt (now become the Bundes Nachtrichtendienst, the German Intelligence Service). He furnished various Soviet Army publications and reported on his unit's activities in Vienna, but in June 1954 was forced to seek asylum because a cache of documents he had stolen was found and an investigation was under way. He had been the battalion librarian and mail clerk, an ideal position for intelligence purposes. He ultimately was debriefed at the DRC and entered the United States Army as a Lodge Act alien enlistee in April 1956.

The case of this Junior Sergeant is coupled with that of a Junior Lieutenant as two high points in the defector program because of their comparative purity of motivation. Ivan Ovchinnikov, Junior Lieutenant with a Radio Intercept Regiment, told how he was embittered by the fate of his father, who was imprisoned by the regime in 1933 and released, blind and partially insane, to die in 1946. Having thus tasted the horrors of the regime, Ovchinnikov defected when he had an opportunity in Berlin.[1] A serious and thoughtful young man, he gave U.S. intelligence his ideas on deterrents to Soviet military defections. He pointed out the West's failure to provide a sub-

[1] Since this article went to press, Ovchinnikov has redefected to the USSR. — Editor.

stitute for the military way of life which some individuals — Soviet as well as Western — seem to crave, noting that there are no military formations of Soviet exiles.

Ovchinnikov may have been right. The Labor Service company units in Europe cannot be called military formations, although they offer the empty forms of the military mode of living — barracks, uniforms and a hierarchy of officers. Neither does the Lodge Act Alien Enlistment Program do the job adequately in that it does not place former Soviet soldiers in national units.

Loyalty in the Soviet Army and its effect as a deterrent to defection have been dealt with at some length because until recently the propinquity of the masses of troops to areas where they could defect has resulted in their forming the bulk of defection cases. It is important as well, however, to understand some of the factors in the motivation of Soviet civilians, especially in view of the current exchange programs which allow large numbers of Russians to tour and attend conferences outside the USSR every year.

Civilian Defections

After forty years of Communism, the people of the USSR and especially its elite are in a political sense completely the product of this environment. There have been no other political and economic influences exerted on those who are younger than fifty. Those who are older remember only vaguely an *ancien régime* in dissolution. The Russian writer Boris Pasternak deals with this phenomenon in his latest novel, "Dr. Zhivago," which was smuggled out of the USSR in manuscript and published in Italy early in 1958. His title character, speaking in 1917 after the October Revolution, says:

> I think too that Russia is destined to become the first Socialist State since the beginning of the world. When this comes to pass, the event will stun us for a long time, and after awakening we shall have lost half of our memories forever. We'll have forgotten what came first and what followed and we won't look for causes. The new order of things will be all around us and as familiar to us as the woods on the horizon or the clouds over our heads. There will be nothing else left.

Pasternak's observations reflect what has actually occurred. Since 1917 the monolithic state has produced in its citizens the nearest thing possible to what might be called a monolithic attitude of mind. It has shielded them from all but one doctrine, given them but one way of life and one reading of history, economics, politics and sociology. The rest of the world has been pictured in caricature. Soviet society represents to its citizens, and the Communist Party to its members, their whole known world, the only place where they can work, have friends and find understanding.

The Communists fell heir to a cohesive force in taking over the citadel of "Holy Mother Russia": even emigrés whose families had been almost exterminated in the Revolution have been induced to return home or to cooperate with the Soviets in the name of Mother Russia. But to this inherited magnetic concept another has been added. The USSR is the home of the Communist philosophy — a latter-day lay religion offering its devotees a complete *Weltanschauung* lacking in the democracies, which harbor a diversity of competing world views and religions. Russian Communists are taught to look on the Western Lockean system as an outmoded creature of the 18th century, comparing poorly with the "modern" politico-economic philosophy fostered by Marx in the 19th century and revised by Lenin in the 20th.

The real progress made by the USSR under Communism appears in the eyes of its devotees to substantiate these teachings, and it has been observed that the rate of defection among Soviets varies with atmospheric conditions prevailing in the "climate of success" they are attempting to create for their system. From October 1957, when Sputnik I appeared in space, to date (August 1958) only three Soviet citizens have appeared in defector channels: one of these, strongly suspected of being an agent, has been "burned" and placed in a refugee camp; a second, after staying with the British for several months, was repatriated to the USSR; and the third, a paranoiac in serious trouble in his Embassy at the time of his defection, wavered for some time but finally elected to return to Soviet custody. During the three months prior to Sputnik I, the period in which the USSR announced its ICBM and stepped up its propaganda for negotiations and disarmament, there were *no* genuine Soviet defectors. Six Soviets who came into U.S. hands during this period have all turned out to be either proved agents or so highly suspect that they have had to be "burned" and disposed of in refugee camps.

It thus appears possible that the solid scientific achievements of the USSR, its economic gains, and its "peace" propaganda have now been sufficiently successful in convincing its citizens that Communism is indeed "the wave of the future" to have an effect on the foundering Soviet defector program.[2] The proof of this speculative explanation, of course, lies in the minds of individuals not available for questioning; but the fact remains that in previous years the flow of genuine defectors has been much greater (approximately 15 per year) and the number of Soviet agents smaller, while the number of individuals in trouble and therefore likely to defect should stay fairly constant year after year.

Defection is also probably discouraged by an impurity in the Communist system of which Djilas complains in his book *The New Class* — the emergence of an elite not foreseen in any of the writings that laid down the precepts of socialism and Communism. The intellectuals, scientists, managers, artists, writers, professors, and military and intelligence officers in the USSR have a far greater share in the good things of life than they would have in the West. Others can hope that they or their children will one day become members of this elite and enjoy an exalted position which they could never achieve in Western society.

There have been defectors from these elite groups. Names that come immediately to mind are those of Gregoriy Ryapolov, mentioned earlier; Anatoli Skochkov, a former USIA lawyer in Vienna who defected in a drunken fit of depression in 1954; Yuri Rastvorov, an ex-MVD officer who defected in Tokyo in 1955; MVD Lt. Colonel Gregoriy Stepanovich Burlutskiy, whose defection in 1953 set off the rumor that Beria had come over to the West.[3] All four, however, were in real trouble prior to defecting. Each, it is true, was dissatisfied with the restraints

[2] The author does not imply, at a time when for example increasing myriads of East Germans are seeking asylum in the West, that the Satellite defection program is so "foundering." — Editor

[3] Burlutskiy was wearing a watch given him by Beria with the latter's name on it and a citation for his services in "pacifying and resettling" various minorities in the USSR. In Afghanistan, where Burlutskiy came out of the USSR, a journalist who couldn't read Russian was able to make out the word "Beria" and touched off the rumor heard round the world.

imposed by the regime, but it was his personal difficulties rather than political dissatisfaction which precipitated defection. There never has been a defection among top-rank or even lesser Soviet scientists to match that of Bruno Pontecorvo. Vladimir Petrov, who defected in Australia, changed his status from KGB officer to owner of a chicken farm. No matter what one may think of Soviet society, it is presumably pleasant to be at the top of it.

Semantics also play a role in obstructing the encouragement of defection. One of the greatest problems is discrepancies between Russian and Western usage in the meaning of specific key words in the realm of international affairs, discrepancies which have led to the loss of links with the Soviet people, a serious breakdown of oral and written communication. This nightmare of semantics has forced Western scholars to write articles explaining "How to Understand Communist Jargon." Any diplomat who has bargained with Soviet representatives recognizes the problem, and it arises in face-to-face negotiations in inducement too. Even with adequate translation, there are no real equivalents between our vocabulary and the Soviet in whole areas of words dealing with politics, sociology, and economics. This is the reason why much of our propaganda fails to make an impact within the USSR. A whole Soviet generation has been educated that certain old words have new meanings within the Communist frame of reference. In our propaganda we tend often to use these words in their Western sense, thus failing to speak the language of the audience. Defectors have pointed out that because of this lack of semantic exactness the Soviet audience sometimes regards our propaganda as unscientific and confused. Some of the most effective propaganda produced is written by Trotskyites and ex-members of the Party who understand Communist jargon and know how to use it.

The broad conclusions of this article coincide with what psychiatrists and psychoanalysts have said about defection. Enough experience has been garnered in the past five years to enable them to draw certain generalizations in this field, among which stands the statement that "ideological reasoning was practically never found at the basis of the decision to defect. Rather, much more often there was an impulsive discharge of accumulated tensions, and an eruption of intense emotional

needs which demanded satisfaction. . . . Defection is a traumatic experience which takes place at a time of personal crisis. . . ."

One can only add a footnote for use of the officer charged with the task of inducing the defection of Soviet officials. Take a leaf from the book of the case officer who brought in Ryapolov, and look for a Soviet up to his ears in troubles. Experience has shown that you are likeliest to be successful if you do.

Creating a happy humdrum life in America for defectors from Communism is an important but trying and sometimes impossible aftertask of their intelligence exploitation.

DEFECTOR DISPOSAL (US)

Delmege Trimble

Perversities of human nature reach some kind of ultimate in the typical individual consigned to the Defector Reception Center (US). Problems of weaning an erring fellow-being from psychological and economic dependence multiply when the subject is an alien who, having deserted his own country for personal reasons, remains imbued with an ideology which discourages self-reliance. Before going into the workings of the Defector Exploitation, Rehabilitation, and Resettlement Program,[1] consider the "patient" of the Central Intelligence Agency's clinic in human relations:

Nervous strain grips the man in the new PX clothing recently arrived in the United States, probably from the Defector Reception Center (Germany). The furtiveness of his deep-set eyes and the lines that crease his Slavic face, from high cheek bones to square jaw, reveal the defector's guilt complexes and fears of the future. His americanization may have begun in a barber's chair where a pompadour was reduced to a crew cut, but his transformation into a worthwhile citizen of the West will be an involved process stretching into the indeterminate future.

No two domestic disposal cases, to be sure, are clinically the same, but this stocky man in his thirties is a composite representative of the defectors received in the US Center. Truculent, ambivalent, probably psychotic, and certainly convinced that he should be rewarded for slipping through the Iron Curtain, the typical defector displays mental gyrations which reveal a congenital problem personality. Almost invariably his escape has been motivated by personal rather than ideological reasons. This has been true without exception of defectors

[1] Set up under the original NSCID's 13 and 14, now incorporated into NSCID 4.

from the USSR; the exceptions occur among defectors from the Satellite countries, who may have fled in abhorrence of regimes forcibly imposed on their homelands. A Pole or a Rumanian is infinitely more cooperative than a Soviet defector, and his conversion is correspondingly simplified.

Defectors, it should be explained, constitute by definition only a relative handful of the half-million runaways from Communism who have been welcomed to the United States. The chief criterion used by the Interagency Defector Committee to determine whether an escapee is a defector in the sense of the NSCID is knowledgeability. Ex-officials from the Soviet Orbit, whether diplomatic or military, and almost all persons, regardless of status, from the USSR itself, are considered defectors, whereas a common soldier in the Polish Army whose intelligence potential is presumably low is normally labelled an escapee. It is thus apparent that even Satellite defectors have been identified, at least ostensibly or temporarily, with Communism.

Since a peculiarly egoistic and parasitic attitude of mind is required to dispose a middle-level bureaucrat or army officer to renounce the USSR, the chances are practically nil that he will become oriented in the West and self-supporting on his own initiative. He is a far cry from the young Communist intellectual who sparked the Hungarian revolt of October 1956 or the stolid man of the factories, inspired by Utopian ideals of a democratic workers' state, who took up the fight.

Defector Dumping: A Case Study

Defectors were first brought to the United States after World War II by federal agencies who had primary interest in exploiting them for positive foreign intelligence information. They were not men who could simply be returned to PW cages after being interrogated; yet little consideration was initially given the disposal problems involved. The practice of cutting defectors adrift on the American economy after their intelligence and propaganda values had been exhausted gave rise to inevitable difficulties such as those dramatized in the Pirogov-Barsov case, which demonstrated the need to set up an adequate program for disposing of defectors brought to this country.

In October 1948 Peter A. Pirogov, a Soviet pilot, and Anatoly Barsov, his navigator, had flown a MIG from the Ukraine to the US Zone of Austria. Their exploit was greeted with official and popular acclaim, and before long they were brought, amid continued wide publicity, to the United States. Here they were treated to a 10-day tour of Virginia, in accordance with their wishes to see the beauties they had heard extolled in propaganda broadcasts beamed to the USSR. After their intelligence debriefing they were furnished some financial aid until March 1949 and thereupon they were cut loose to shift for themselves. Without employment, funds, or knowledge of a foreign land, the pair drifted from one desperate situation to another. Barsov was hopelessly unadaptable and consoled himself with whiskey and domestic vodka. Demoralized, he finally contacted the Soviet Embassy in Washington and arranged to return to the USSR.

Cloak-and-dagger aspects of the situation were intensified when Barsov, acting on Soviet Embassy instruction, was trying to induce Pirogov to redefect. Pirogov reported these efforts to CIA representatives, who made arrangements to monitor a meeting between the two in a Washington restaurant. CIA agents were prepared to prevent any attempt at kidnapping Pirogov and to take advantage of the outside chance that Barsov might be persuaded to remain. But other US agents at the restaurant, independently assigned to the case, began a fracas before the discussions between the defectors had got under way, and in the ensuing confusion Barsov and Pirogov were spirited away in separate cabs by the two separate sets of Government representatives.

Barsov was returned to the USSR in 1950. The presumption that he was executed for his defection was confirmed by the onetime MVD agent Vladimir Petrov, who defected in Australia in April 1954. But in May 1957 the Soviet Foreign Ministry theatrically produced for foreign correspondents a live exhibit who was introduced as Anatoly Barsov, "shot by the American press." This demonstration was occasioned by the sceptical publicity given in the West to a purported letter from Barsov which Soviet Second Secretary Dimitri Mashkantsev used in trying to persuade Pirogov to return to the USSR. Steadfast in his refusal to return, Pirogov has nevertheless

maintained an attitude of querulous dissatisfaction with his treatment in the United States. He only recently has accepted employment as a Russian language instructor at a local university.

The Rehabilitation Program

It was to cope with mounting problems of rehabilitation and resettlement such as these that the Defector Reception Center (US) was instituted in 1951. Property was acquired and operations begun that same year. The primary purposes of this little-known program are a) to prevent redefection with its adverse propaganda effects, and b) to resettle the defectors and integrate them into the US economy so that they can provide for their own support.

Installing a defector in a job is relatively no great problem. The problem is to induce him to stay with the job and become a part of the community, overcoming his fear, doubt, false concepts, guilt complexes, loneliness, and language difficulties. The program attacks this problem in three stages:

1. If the defector's debriefing has not been completed overseas, he is further exploited for foreign intelligence upon his arrival at DRC (US).[2] During this exploitation he is also preconditioned for his eventual resettlement by being introduced to American traditions through visiting historic spots in the Washington area. Strenuous efforts are made to keep up his morale.
2. As soon as conveniently possible, he is taken to a safe house removed from the city's confusion and distracting influences, which are not conducive to a happy metamorphosis. Here, under close supervision, his rehabilitation is begun in earnest. This is a twin process, comprising psychological adjustment to restore the individual's mental equilibrium on the one hand, and "resocialization," that is reorientation for membership in a society different from any he has known, on the other.
3. When the rehabilitation process has been completed — in anywhere from a few months to four or five years — the defector is resettled. He is found suitable employment somewhere in the United States, and responsibility for him is transferred from the DRC to a field office in that area.

[2] In some cases he may be placed under contract for a year or more, and even later his knowledge of Soviet affairs may be recurrently utilized in light of new developments.

The ideal goal of the program, transformation of the defector into a useful and self-supporting member of the community, is not always achieved. One of the earliest showcase exhibits in defection occurred in the United States[3] when Oksana Kasenkina jumped from the third floor of the Soviet consulate in New York on 21 August 1948. Her legs, arms, and pelvis were broken in the leap to freedom that became a diplomatic incident when the Soviets sought to regain her custody. The proceeds from a book and series of magazine articles she wrote while convalescing, some $40,000, lasted her only a year, and in 1949 she became a CIA ward. Today, at the age of 61, her propaganda usefulness long since exhausted, she continues to be an expensive liability, staying alternately in Miami and a nursing home in Boston. She must be well cared for, if for no other reason, simply to prevent redefection. For in addition to her physical infirmities, Madame Kasenkina suffers from the psychosis that she is being pursued by Communist agents.

Defector Types and Motivations

Although no two cases are alike, certain generalizations can be drawn about the personalities and motivations of defectors. According to the Kluckhohn Report issued by the Center for International Studies, Massachusetts Institute for Technology, 55 percent of defectors sampled in a study were diagnosed as "severely maladjusted" and 20 percent showed "actual acute pathology." Even in those defectors who were relatively normal before, trauma may have been induced by guilt feelings over their betrayal of motherland and associates and by the difficulties of readjustment first to German and then to American environments. So it is that in nearly all of them patterns of fear, apathy, depression, resentment, and hostility are manifested in various orders and to varying degrees. The violent mood swings of defectors may be laid in part also to national characteristics: the Kluckhohn Report noted that such am-

[3] The Federal Bureau of Investigation has the immediate responsibility for defectors who are already in the United States when they request asylum. When the FBI has established their *bona fides* and released them, however, CIA may be requested to aid them in adjusting to life in America.

bivalence is more characteristic of Soviet man than of the Western European.

Defectors can usefully be classified into "primitive" and "complex" types and by grouping according to age. Young defectors in general need more help, but usually more can be accomplished with them than with the older ones whose psychology as individuals is more firmly set. Defector personalities cover the spectrum from self-evaluated "hero" and "adventurer" to outright screwball and crook. There is also the ambitious, prestige-disappointed man like Lt. Col. Yuri Rastvorov, Soviet second secretary in Japan, who decamped after the British Officers' Club distracted him from his intelligence mission.[4]

Defections are frequently an act of rebellion against Communist controls and regimentation after a taste of relative freedom in the West.[5] Occasionally defection is inspired by utter repugnance, as it was for Nikolai Khokhlov. Partly at his wife's instigation, this MVD captain revolted against his assignment to assassinate a NTS (Russian Solidarist Movement) leader in Frankfurt, Germany, in May 1954. He was brought to the United States for resettlement and after the first year became financially independent, earning money from magazine articles and the serialization in foreign papers of his book *In the Name of Conscience*. Not content to take life easy, he campaigned in a futile effort to save his family and then joined in the underground fight against Communism. An unsuccessful attempt against his life, attributed by some to Soviet agents, occurred in 1957 when he was on a trip from Paris to Frankfurt, where he was in contact with anti-Communist refugee organizations.

[4] That he was a Beria man fearful of his future doubtless contributed to Rastvorov's defection. His failure in a mission and subsequent flight were in character with a psychological assessment of him made after his arrival in the United States. The conclusion that he is an egotistical dilettante who cracked when the going became rough has been borne out by persistent characteristics of his behavior during the course of efforts to resettle him.

[5] Material attractions in the Western world should not be overestimated. Very real deprivations and frustrations exist, of course, in the USSR and its Satellites, but the Refugee Interview Project concluded that most people's satisfactions in daily living are substantially greater than generally supposed.

Others have fled their homelands to escape reprisals, for example Josef Swiatlo, dreaded deputy chief of District 10 in the Polish Ministry of Public Security from 1948 until his defection on 5 December 1953, after the execution of Beria.

A spirit of adventure occasionally impels defection. After the Soviet tanker Tuapse, bound for Red China, was intercepted by the Chinese Nationalists in October 1955, 19 seamen jumped ship in Taiwan and sought asylum. Of the nine young sailors brought to the United States, four have remained.[6] Three of these are gainfully employed today, and the fourth is in school. A bill recently introduced in Congress would change their status from parolees to permanent alien residents. In the meantime, having been granted political asylum, they are responsibilities of CIA, although they are completely non-productive for intelligence purposes and as bad a headache at times as sailors on the beach can be.

Rehabilitation Procedures

In its initial approach to defectors brought to the United States for resettlement, the DRC (US) is friendly but frank about their future. In spelling out to them the steps involved, the Center emphasizes that successful resettlement depends upon their complete cooperation. No promises and no commitments are made that are not absolutely feasible. Equally explicitly the point is made that defectors are not regarded as "hirelings" or "traitors" but as persons who had the courage to leave a social order that was bad for their homelands. Yes, they are told, you have gone through hell, but now is the chance to play a part in a new and better existence.

Rehabilitation begins with the defector's assignment to a CIA case officer. For his initial period in this country, at least, it is esssential that each defector be assigned to a single case officer — a counselor whom he can come to trust and turn to on all matters. The designation of only one case officer, incidentally, short-circuits any inclination the defector may have to play off one counselor against another. The single counselor, for his part, will be able to get a fuller understanding of his ward's personality in order to help his readjustment and anticipate any danger of a breakdown or redefection. During

[6] Five returned to the USSR in fear of reprisals.

this period in Washington, the case officer in charge is responsible for securing transient housing for the defector, arranging his exploitation for foreign positive intelligence, maintaining his morale, and taking care of the many details connected with his presence in the United States.

Intensive individual assessments are meanwhile initiated by headquarters medical and psychiatric staffs to supplement the case histories prepared by intelligence officers abroad. Psychological or vocational aptitude studies are also made to determine the defector's employment qualifications. The goal here is to fit him into a stratum of society appropriate to his capabilities and earnings and to his status in the country he fled, and to give him an environment conducive to successful resettlement.

When the defector is transferred to a safe house, he begins the sometimes prolonged process of reorientation and adaptation to a new culture. Here he is introduced to US traditions and the everyday life of the average American citizen. He is shown the difference between the ideology of unlimited opportunity and that of the totalitarian state. He is disabused of the concept of extreme polarity between good and bad social phenomena which he has acquired from Communist indoctrination: American ways are not portrayed as perfect, but only better than those of Communist countries.[7] He is also taught the rudiments of the English language, enough to speak and read a little. He can gain some degree of fluency at a US naturalization school in the area where he is later resettled.

But formal schooling is not enough. If the primary purposes of DRC (US) are to be achieved, the defector's usual concepts of political government and daily existence must be drastically altered. The woes of the immigrant in the American melting pot are compounded by the thousands and one phobias peculiar to the defector.

The case officer's first — and, unfortunately, frequently continuing — problem is usually to decompress the defector while at the same time maintaining his morale. The usual defector has delusions of grandeur inspired by the old notion that US

[7] Successfully resettled defectors not infrequently continue for some time to accept many goals of the Soviet system even while rejecting the means and conditions created by the current regime.

streets are paved with gold and a distorted sense of self-importance in consequence of his initial exploitation and notoriety. These delusions may persist for years, especially among the many congenital misfits whose background and personality structure place them beyond the reach of most known techniques of vocational guidance. These individuals are interested above all in making considerable money with the least possible expenditure of energy. The world of work is far less stimulating to them than the world of make-believe which largely determines their attitude. They look to their benefactor to support them, and they seek devices to get the most possible out of him. In extreme case they resort to extortion and complain to Congressmen about their treatment, threaten to redefect, etc.

Infinite patience is required of a case officer during the process of spoon-feeding a charge who can't digest democracy in large doses. But once a minimum of confidence has been established the case officer adopts, whenever a defector becomes difficult, what is known as a "gruff paternalistic note." The usual defector has a grudging admiration for strong and arbitrary authority as the only safeguard against the excesses of the Russian nature. He will revolt from time to time against authority, but he nevertheless wants it and needs it until some progress has been made in his adjustment to American life. This authority, however, he must not think of as that of an elaborate hierarchy which holds him completely at its mercy, but rather as that of one person to whom he can also turn for guidance. In this relationship, and with an unequivocal system of rewards and punishment, he can come to recognize that as he behaves responsibly he will not be controlled with rigidity.

In his role of father confessor, the case officer can play a powerful part in promoting a defector's rehabilitation. In the eyes of his ward he becomes a reflection of America, illustrating its good aspects and mirroring in any flaws he displays its bad ones. Openminded discussions between them about US domestic issues and international perspectives should supplement the presentations of lecturers at the safe house, and may be more convincing.

The time required for rehabilitation varies with individuals from weeks to years. Quick acculturation is desired, of course,

in order to effect resettlement as soon as possible, with the objective of making the defector self-reliant and self-supporting. But one obdurate escapee has been taking the course for five years, and there is little hope of his ever graduating. At the other extreme stands a young Bulgarian defector, an electronics engineer, who promptly scanned *The New York Times* want ads upon his arrival at Idlewild Airport and today is filling a $150-a-week job in Boston while attending MIT in off hours. His behavior shows not only his individual character, but also the results of an excellent preconditioning at DRC (G).

A number of factors affect the rate at which a defector is able to learn how to adjust himself to his new environment, but the most universal of these is the degree of disparity between the American culture and what he has hitherto known. Just as immigrants from the UK and Scandanavia become assimilated more rapidly in the United States than those from Southern or Eastern Europe, so the adjustment process is more difficult for a defector who has been exposed to nothing but the Communist system in the USSR during his entire formative life than it is for a Czech who has spent only a few years under such a system.

Resettlement Procedures

After a defector has finished the rehabilitation process, there is the problem of obtaining employment for him. If he formerly had some trade or was, say, an electronics engineer in Poland, placing him may not be difficult. If not, he can often be given schooling or on-the-job training. But what's to be done with a hired murderer? He may have had a cushy job under Soviet bureacracy, but what sort of work is to be found for an ex-MVD or KGB agent in the US economy commensurate with his former status?

A difficult case short of this extreme was that of Milos Pacak, *chargé d'affaires* at the Czech Embassy in Rome, who defected in 1952 and was brought to the United States the following year. Besides what he was paid as inducement to defection, he had been promised employment in the United States commensurate with his background and abilities. But he could hardly be transplanted from his Communist diplomatic post to one in the Department of State, and he refused lesser employment proposals on the grounds that, although the jobs

were good, they were not up to his former position. So for two years he loafed, drunk and unshaven much of the time, and used blackmail to extend his Government subsidy. His story has a happy ending, however: his wife and son, who adapted well to American ways, in turn assisted in his rehabilitation, and he is currently employed doing language research at a university.

Defectors are sometimes given contracts with US Government agencies, but this measure is usually a temporary one; eventually they will have to find private employment. So suitable jobs are sought with the help of CIA's domestic field offices, which study the results of the defector's earlier aptitude tests, his background, training, and experience, and communicate with likely employers. Security factors in individual cases determine whether the approach to prospective employers should be made directly or through cleared cutouts. Whenever it is practical and clearances permit, employment and social service agencies and foreign nationality groups[8] are called into the job hunt.

Once prospective employment has been decided on, the field office in the area takes over and a single contact specialist replaces the case officer. The contact specialist assesses the defector's cover story from the standpoint of its plausibility in the eyes of the prospective employer. Next he briefs the defector about the firm or firms considering him and makes certain that he is presentable. He accompanies the applicant to interviews but participates only when necessary to rescue him from a break in his cover story or a lapse in his English.

[8] But the availability of suitable positions rather than the presence of ethnically similar groups dictates the selection of a geographic area for resettlement. Attempts to enlist the services of a previously resettled defector in resettling another have been anything but successful, and it has been found advisable to keep Soviet defectors separated in resettlement. Instead of working together, they are likely to regard their own kind with suspicion. A Soviet artillery major, a tank captain, and an infantry lieutenant working on the same Department of Defense project once got into a brawl when the captain insinuated that the bragging major had stolen his Hero of the Soviet Union medal from a corpse. An alerted CIA officer divested the broken-nosed major of a butcher knife, and the comrades were reassigned.

If the defector is hired, the contact specialist assists him in finding suitable housing conveniently located with respect to his new employment. He makes sure that the accommodations are not beyond the man's means and that the landlord is neither suspicious nor unscrupulous. He checks on whether the defector has enough money for immediate needs, appears presentable, has his alien registration card, and can fill out employee forms, such as designation of insurance beneficiary, in accordance with his cover story. He traces the route to and from work with his charge, and on his first day on the job takes him to lunch or meets him after work, discusses his reactions, boosts his morale, answers question, etc.

The contact specialist's responsibility is a lasting one. He gives continued friendship and guidance to the defector without allowing him to become so dependent that his development of self-sufficiency is inhibited. He keeps on the alert for any circumstances which may threaten the security of the case, and he keeps a reasonably detailed account of his man's integration into the community. He forwards periodic status reports to Washington, and in any emergency notifies headquarters immediately. If all goes well, the defector adjusts himself to American ways and after five years may apply for US citizenship.

It rarely goes so smoothly. Many resettled wards regard the acquisition of a television set and sporty car, regardless of their ability to keep up the payments, as a *sine qua non* of life in the United States. Many mix alcohol with gasoline and rout some case officer or contact specialist out of bed in the middle of the night to go bail for them. An obstreperous Finn is now serving 85 days in jail after a Minnesota court became wearied of his being taken off the hook; his latest escapade had hospitalized two deputy sheriffs in a head-on collision.

Despite constant nursemaiding, some resettlement cases must be turned back to DRC facilities for further rehabilitation. Some never are resettled, and an estimated 10 percent become permanent welfare charges. As General T. J. Betts once remarked, there is nothing more durable than a defector. But considering the material with which DRC (US) has to work, the countless man-hours and finesse that go into the program are highly effective.

A technician's personal story of his work in radio and photographic transmission of intelligence to the British service affords a glimpse of wartime espionage through foreign agent eyes.

REMINISCENCES OF A COMMUNICATIONS AGENT

Expatriate

During World War II, I was employed by the British intelligence service in one of the European countries which was at first neutral, then a German ally, and finally under German occupation. I had two concurrent jobs. One was to maintain radio communications with a base on the Mediterranean some 750 miles away. The other was to photograph intelligence reports, maps, and sketches and to conceal the films in inconspicuous objects which could be smuggled across the border.

Some of the techniques used in these operations were supplied by my superior and some were of my own devising. Although these procedures have now undoubtedly been antiquated by technical progress since the war, they should still hold some historical interest. Certainly some general principles of conduct which were important to me have continuing validity as precepts for the clandestine agent of today.

After the Germans had overrun my homeland and imprisoned me along with many others, I escaped and made my way to this country which was still neutral and where the people were traditionally well disposed toward my people. I wanted to avenge the ravaging of my homeland, within my small individual power, and to continue the struggle against its brutal occupier. Therefore, although I am not British nor a great admirer of the British, I entered their intelligence employ as the occupation most promising for fulfillment of this my purpose.

The work was dangerous, very dangerous after the Germans came in. Every person living in the city where I worked had

to be registered. Block managers and the superintendents of apartment houses were charged with seeing to this registration; they enforced it scrupulously, so that it was virtually impossible to live there without having a card in the file at police headquarters. A separate file was kept on foreigners. When the Germans came, one of their first acts was to take over this file, and they began arresting suspects on the very first day.

That I was not arrested I attribute to the virtue of my simple and partly genuine cover. I was actually a student at the polytechnic institute, and I remained by choice a very needy one. I found quarters in a servants' boarding house, a small room not opening on the hallway but directly off the kitchen, which fortunately had an outside entrance. Foreign students who lived in better quarters or could afford luxuries the Germans became curious about.

With respect to my radio work it is not the techniques I used but my lack of techniques and procedures for security that is noteworthy. I made the transmitter myself, and it was a good one for those days; but there was no way its frequency could be changed to throw anyone who might be suspicious of my traffic off the scent. I therefore limited my transmissions to two hours each.[1] I changed the location from which I made radio contact as often as I could, but I had to work in the city or its inner suburbs. Most of my transmitting, in fact, was done from a house only about 30 yards from one of the Gestapo offices.

Moreover, there was no securely established schedule for these radio contacts, and at the end of each transmission a time for making the next one had to be arranged. If the Germans had deciphered these arrangements they would have known when to look for me next. There was no kind of guard or even lookout during the transmission; I was always alone, with two pistols for protection.

Once when I was called upon to lend my transmitter to a friendly intelligence service in an emergency, I had an opportunity to observe the security precautions they took for their operators. They had the use of isolated buildings in the country for their radio contacts, and they kept five to eight armed guards around the house, lying in the grass at a distance of fifty yards or so, all during the transmission. On one occasion, they recalled, the Germans had come raiding, but the guards held them off while the operator escaped with his equipment.

[1] Under the circumstances described a limitation to fifteen minutes would have been the proper precaution. — Editor

Unfortunately, my superiors were not willing to furnish this kind of protection, and the work of transmitting was consequently quite enervating. I was compensated and heartened, however, whenever the American bombers would come over and destroy some enemy airfield and I knew that my efforts had helped make the raid possible.

In my photographic work I felt less exposed, if scarcely at ease. The Germans usually made their house raids and arrests either between six and eight in the morning or between ten in the evening and midnight, so the hours between one and six a.m. were comparatively safe. Once every two weeks or so there would be an accumulation of material for photographic forwarding and a courier, witting or unwitting, to take it out of the country. My superior would bring me this material after midnight. I would get to work on it by one o'clock and finish by about five. Then I could get an hour's sleep before meeting my superior at six to deliver the product.

The material consisted of typewritten intelligence reports, maps locating bombing targets, sketches of military installations, layout plans of airfields and refineries, etc. The language was usually French, sometimes German, never English to point to the identity of the service. Some of the reports were enciphered. Usually there would be 30 to 40 pages of typing and three to five maps or plans; but once there were 80 typed pages and 40 sketches, a substantial quantity of incriminating paper in my little room. The sketches required quite a bit of preliminary work before photographing. They had been made by agents employed at the installations they pictured, and they needed some cleaning up and a calculation of the proper enlargement ratio to keep their scale true. An accompanying report would usually refer to the sketch and give further data on the plant or airfield, such as precise location, whether surface or underground, number of planes, troops, fuel tanks, etc.

I used a Leica camera with a 24x36 mm (1"x1½") frame, usually without the close-up attachment. I laid the original materials out on the floor and fixed the camera perpendicular to them. It could accommodate six typed sheets in one frame, but usually only one of the large sketches at a time. I shot each frame three times, to get two negative copies to keep in reserve. This part of the work was done under the greatest tension, with the material spread out all over the room. Whenever the gate opened, I stopped and listened to the footsteps on the stairs which told me what floor the late comer was heading for. If he stopped climbing at my floor, I frantically tried to get things out of sight. The Gestapo did make arrests in this boarding house, but never came to my room.

The next job was developing the film. (I had often considered lightening my work by sending out undeveloped film, which would also have been less dangerous for the courier; but I wanted to check the developed negatives to be sure they were good, and I was reluctant to risk the damage in transit to which undeveloped film is liable. I therefore never tried it.) After washing off the fixer solution I rinsed the film in alcohol to hasten its drying, and then immediately checked the legibility of the photographed texts with a special magnifying glass. When I was satisfied that the negatives were all good I could start burning the originals in the kitchen stove next to my room.

By the time I had disposed of the original papers, the film would be dry. Taking a strip of a dozen frames at a time, I placed it emulsion side down on a sheet of plate glass and wiped the back with a piece of cotton dipped in acetone until the heavy celluloid was dissolved and only the thin emulsion remained. I now cut the emulsion strips into individual frames and separated the negatives which were to be sent out from the two copies to be kept in reserve against the possibility of loss in transit. The reserve copies I put in a match box or wrapped in a paper. I tied this tiny package on the end of a string and suspended it through a hole in the wall under the kitchen sink, sealing the hole afterward so the end of the string was not visible. It would be only through the unluckiest of coincidences that this cache would be discovered.

I then returned to the negatives to be dispatched. You recall that there were six pages of typing on each frame. These I cut apart, so that each page of the original report was now represented by a wafer of emulsion less than a quarter-inch square, and very thin. Stacked together in page sequence, 40 pages would be less than an eighth of an inch thick. When packaged for the courier the stack was usually rolled into a pellet the size of a small pea.

How the film was packaged depended on whether the courier was witting or unwitting and how he would cross the border. One of the unwitting couriers was a German — and a Nazi Party member — who traveled on business to Switzerland and Turkey. For him I once concealed the film in the lining of a lady's compact which my superior asked him to carry as a gift to a friend in Ankara. A sentimental letter accompanying the compact secretly instructed her what to do with it.

For witting couriers who were not likely to be suspected a good place of concealment was the heel of a shoe. Safer, however, was a pack of cigarettes. I would open a new pack, being careful not to leave any evidence of tampering, take a cigarette from the middle of it, remove half the tobacco, insert the film pellet, repack the tobacco, and reseal the pack so that it looked fresh from the factory. The report might possibly be lost, but there was little chance that it would be discovered.

But it was best not to use the same method repeatedly. One variation I used was the flashlight battery. I took apart the middle cell of a three-cell battery, replaced part of the contents with my film pellet, and resealed the cell. This cell would be dead, so I substituted a lamp rated at two volts for the original rated at three and a half in order to avoid any suspicion arising from a weak light.

When word was received by radio that the report had arrived, I would recover the two reserve copies from under the kitchen sink and burn them, so as to be left briefly without any compromising material on hand. The reports, as a matter of fact, always got through, and I was praised for my packaging. There were never even any complaints that passages were illegible.

I should like to emphasize again, in conclusion, that my success was due in large measure to the fact that I always lived

in very humble circumstances. None of my friends and acquaintances could have imagined that I was doing intelligence work. The landlady thought me a poor and simple student. I stipulated to my employers that I should be paid only enough to subsist on from month to month, for an agent who spends freely, shows that he has money, or frequents expensive places is not a secure agent.

A review of legal precedents for protecting sensitive information from disclosure in the courts and Congress, with particular reference to Central Intelligence privileges.

EXECUTIVE PRIVILEGE IN THE FIELD OF INTELLIGENCE

Lawrence R. Houston

Recent agitation in congressional and newspaper circles against "secrecy in government" has focused attention on information security measures in the Executive Branch. The courts, too, have declared in recent months that information used by the government in preparing criminal prosecutions and even some administrative proceedings must be divulged, at least in part, as "one of the fundamentals of fair play."[1] In this atmosphere, the intelligence officer may reflect on the risk he runs of being caught between the upper and nether millstones of congressional or court demands on the one hand and the intelligence organization's requirement for secrecy on the other.

Actually, the problem of demands for the disclosure of information which the government considers confidential is not a new one, as can be seen from the history of the Executive Branch's struggles to withhold information from the courts and Congress. The Executive has based itself in these struggles on the doctrine of the separation of powers among the three branches of government, which holds that no one of the branches shall encroach upon the others.

The Separation of Powers

Demands for the disclosure of information held by the Executive have been made by the courts and by the Congress since the early days of the republic. On the other hand, the very First Congress recognized, more than a year prior to the ratifi-

[1] *Communist Party v Subversive Activities Control Board;* U.S. Court of Appeals, District of Columbia Circuit, decided 9 January 1958.

cation of the Bill of Rights, that some of the information held by the Executive ought not to be divulged. An act passed on 1 July 1790 concerning "the means of intercourse between the United States and foreign nations" provided for the settlement of certain expenditures which in the judgment of the President should not be made public.[2] During his first term of office President Washington, anxious to maintain close relations with Congress, on several occasions passed information to the Congress with the warning that it not be publicized. In a special message dated 12 January 1790, for example, he wrote:

> I conceive that an unreserved but a confidential communication of all the papers relative to the recent negotiations with some of the Southern Tribes of Indians is indispensibly requisite for the information of Congress. I am persuaded that they will effectually prevent either transcripts or publications of all such circumstances as might be injurious to the public interests.[3]

Two years later, in March 1792, a House resolution empowered a committee "to call for such persons, papers, and records as may be necessary to assist their inquiries" into Executive Branch actions with respect to a military expedition under Major General St. Clair. The president did not question the authority of the House, but wished to be careful in the matter because of the precedent it might set. He discussed the problem with his cabinet, and they came to the conclusion:

> First, that the House was an inquest and therefore might institute inquiries. Second, that it might call for papers generally. Third, that the Executive ought to communicate such papers as the public good would permit and ought to refuse those the disclosure of which would injure the public: Consequently were to exercise a discretion. Fourth, that neither the committee nor the House had a right to call on the Head of a Department, who and whose papers were under the President alone; but that the committee should instruct their chairman to move the House to address the President.[4]

By 1794 President Washington, then in his second term, began to show less liberality in divulging information to Congress, for on 26 February of that year he sent a message to the Senate stating that "after an examination of [certain correspondence] I directed copies and translations to be made *except* in those particulars which, in my judgment, for public consideration, ought not be communicated."[5] Two years later, on 30 March 1796, he transmitted to the House his famous refusal to divulge certain information requested by the House in connection with the Jay Treaty. In this treaty, many people believed, the young republic did not get enough concessions from the British, and the Federalists who supported it had become the target of popular resentment. Washington replied as follows to a House resolution:

> I trust that no part of my conduct has ever indicated a disposition to withhold any information which the Constitution has enjoined upon the President as a duty to give, or which could be required of him by either House of Congress as a right . . . The matter of foreign negotiations requires caution, and their success must often depend on secrecy; and even when brought to a conclusion, a full disclosure of all the measures, demands, or eventual concessions which may have been proposed or contemplated would be extremely impolitic.

Pointing out that he had been a member of the general convention and therefore "knew the principles on which the Constitution was formed," Washington concluded that since "it is essential to the due administration of the government that the boundaries fixed by the Constitution between the different Departments should be preserved, a just regard to the Constitution and to the duty of my office under all circumstances of this case forbids the compliance with your request."[6]

Thus during Washington's administration the doctrine of the separation of powers came to provide the basis for executive privilege in withholding information. This doctrine, not specifically enunciated in the Constitution, emerged from decisions taken on specific political situations which arose during the first years of the republic, as the same men who wrote the Constitution interpreted it in such ways as they thought promoted its intended ends. In this way it was established that the Executive Branch of the Government has within its control certain types of executive documents which the Legislature cannot dislodge no matter how great the demand. The Executive Branch can be asked for documents, but should exercise

[2] Richardson, *Messages and Papers of the Presidents*, 2283.

[3] 1 *id.* 63.

[4] Writings of Thomas Jefferson, 303–305.

[5] 1 Richardson, *op. cit. supra*, note 2, 144. Italics supplied.

[6] 1 *id.* 186.

discretion as to whether their release would serve a public good or be contrary to the public interest.

The Judiciary also recognized, as early as 1803, the independence of the Executive Branch and its ability to control its own affairs. Chief Justice Marshall wrote: "The province of the court is, solely, to decide on the rights of individuals, not to inquire how the Executive, or executive officers, perform duties in which they have a discretion. Questions in this nature political, or which are, by the Constitution and laws, submitted to the Executive, can never be made in this court." [7]

It is notable that this executive privilege was applied in the congressional cases cited above to the President's responsibility for foreign affairs. Under the Continental Congress, the Department of Foreign Affairs had been almost completely subject to congressional direction. Every member of the Congress was entitled to see all records of the Department, including secret matters. But after the Constitution was written, and pursuant to its grand design based on the separation of powers, Congress in 1789 subordinated the Department of Foreign Affairs to the Executive Branch and provided that its Secretary should have custody and charge of all records and papers in the Department. In 1816 the Senate Foreign Relations Committee declared that the "President is the Constitutional representative of the United States with regard to foreign matters" and that the nature of transactions with foreign nations "requires caution and success frequently depends on secrecy and dispatch."

Precedent in Intelligence Cases

Intelligence activities, intimately linked with foreign policy, played their part in the evolution of the Executive Branch's position on disclosure of information. In 1801 Congress interested itself in the expenditures of various Executive Departments and instituted an inquiry "as to the unauthorized disbursement of public funds." In reply to charges that the War Department expended funds for secret service not authorized by law, Oliver Wolcott (Comptroller of the United States 1791–1795; Secretary of the Treasury 1795–1800) gave a clear exposition of the accounting requirements of intelligence which is applicable today:

[7] *Marbury v Madison*, 1 Cranch 137 (1803).

> I never doubted for one instant that such expenditures were lawful, and that the principle should now be questioned has excited a degree of astonishment in my mind at least equal to the "surprise" of the Committee.
>
> Is it then seriously asserted that in the War and Navy Departments — establishments which from their nature presuppose an actual or probable state of *war*, which are designed to protect our country against *enemies* — that the precise *object* of every expenditure must be *published*? Upon what principle are our Generals and Commanders to be deprived of powers which are sanctioned by universal usage and expressly recognized as lawful by all writers of the Law of Nations? If one of our Naval Commanders now in the Mediterranean should expend a few hundred dollars for intelligence respecting the force of his enemy or the measures meditated by him, ought the present Administration to disallow the charge, or publish the source from which the intelligence was derived? Is it not equivalent to a publication to leave in a public office of accounts a document explaining all circumstances relating to a payment? Ought the truth be concealed by allowing fictitious accounts? Could a more effectual mode of preventing abuses be devised than to establish it as a rule that all confidential expenditures should be ascertained to the satisfaction of the Chief Magistrate of our country, that his express sanction should be obtained, and that the amount of all such expenditures should be referred to a *distinct account* in the Public Records? [8]

The statute referred to in the debates was an Act of Congress passed on 9 February 1793 which gave the President authority, if the public interest required, to account for money drawn from the Treasury for the purpose of "intercourse with foreign nations" simply by his own certification or that of the Secretary of State. Actually, this statute reaffirmed the similar legislation of 1790 providing for the settlement of certain expenditures which, in the judgment of the President, ought not be made public.[9] The substance of these Acts was revived and continued in later legislation, and President Polk utilized it in 1846 in refusing to accede to a House resolution requesting an accounting of Daniel Webster's expenses as Secretary of State in the previous administration.

[8] *Control of Federal Expenditures*, A Documentary History 1775–1894, Institute for Government Record of the Brookings Institution, pp. 329–330. Punctuation modernized.

[9] Richardson, *supra*, note 2.

In 1842 Webster had negotiated an agreement with the British representative, Lord Ashburton, on the long-disputed boundary of Maine. To make the treaty more palatable to the public and enhance its chances of ratification in the Senate, Webster had spent money out of "secret service funds" to carry on favorable propaganda in the religious press of Maine. Senator Benton termed this practice a "shame and an injury . . . a solemn bamboozlement." A Congressional investigation followed, during the course of which the request was levied upon President Polk.

President Polk based his refusal to comply on the statutes which gave the President discretionary authority to withhold details on how money was spent. He supported his predecessor's determination that the expenditure should not be made public, asserting that if not "a matter of strict duty, it would certainly be a safe general rule that this should not be done." In his message to Congress he acknowledged the "strong and correct public feeling throughout the country against secrecy of any kind in the administration of the Government" but argued that "emergencies may arise in which it becomes absolutely necessary for the public safety or public good to make expenditures the very object of which would be defeated by publicity." He pointed out as an example that in time of war or impending danger it may be necessary to "employ individuals for the purpose of obtaining information or rendering other important services who could never be prevailed upon to act if they had the least apprehension that their names or their agency would in any contingency be divulged." [10]

The non-disclosure of information relating to intelligence was tested rather vigorously in several instances during the Civil War, and these tests established a strong precedent in favor of the inviolability of intelligence activities. Brigadier General G. M. Dodge, who conducted a number of intelligence activities in the West with considerable results, became the object of relentless criticism for his financing methods. He refused obdurately to break the confidence of his agents by revealing names and amounts paid, and when he was denied the funds necessary for these activities, he had to raise the money for his agents by confiscating cotton crops in the South

[10] 5 Richardson, *op. cit. supra*, note 2, 2281.

and selling them at public auction. Three years after the end of the War, when War Department auditors discovered that General Dodge had paid spies for Grant's and Sherman's armies, they peremptorily ordered him to make an accounting of the exact sums. Receipts and vouchers signed by spies who lived in the South were obviously difficult to obtain, and furthermore the names of the agents, for their own security, could not be disclosed. As a result, when the War Department closed Dodge's secret service accounts 21 years after the war, they were apparently still without a receipt for every dollar spent.[11]

A leading legal decision governing the privilege of the Executive Branch to withhold intelligence also had its genesis in the Civil War. In July 1861 William A. Loyd entered into a contract with President Lincoln under which he proceeded "within the rebel lines and remained during the entire war." He collected intelligence information all during the war and transmitted it directly to the President. At the end of the war he was reimbursed his expenses, but did not get any of the $200-per-month salary for which the contract called. After Loyd's death a suit was brought by his administrator against the Government to collect the salary Lincoln had contracted to pay him.

The case was finally decided by the Supreme Court in 1876, and the claim was denied. Mr Justice Field set forth in his opinion a position on secrecy in intelligence matters which is still being followed today. He wrote that Loyd was engaged in secret service, "the information sought was to be obtained clandestinely," and "the employment and the service were to be equally concealed." The Government and the employee "must have understood that the lips of the other were to be forever sealed respecting the relation of either to the matter." Were the conditions of such secret contracts to be divulged, embarrassment and compromise of the Government in its public duties and consequent injury to the public would result, or furthermore the person or the character of the agent might be injured or endangered. The secrecy which such contracts impose "is implied in all secret employments of the Government in time of war, or upon matters affecting foreign relations," and precludes any action for their enforcement. "The pub-

[11] Perkins, J. R., *Trails, Rails and War*, Bobbs-Merrill (1929).

licity produced by an action would itself be a breach of a contract of that kind and thus defeat a recovery." [12]

The pattern of executive privilege as applied to withholding information on intelligence activities was determined by the resolution of these situations which occurred from the first years of the Republic through the Civil War. Decisions in later cases utilized the precedents which had here been established. In 1948 the Supreme Court, deciding a case concerning an application for an overseas air route, reaffirmed that "the President, both as Commander-in-Chief and as the nation's organ for foreign affairs, has available intelligence services whose reports are not and ought not be published to the world," and defined its own position on cases involving secret information:

> It would be intolerable that courts, without the relevant information, should review and perhaps nullify actions of the Executive taken on information properly held secret. Nor can courts sit in camera in order to be taken into executive confidences . . . The very nature of executive decisions as to foreign policy is political, not judicial.[13]

Intelligence information is recognized by the three branches of Government as of special importance because of its connection with foreign affairs and military security.

Authorities for CIA Information Controls

As an Executive agency CIA partakes of the privileges accorded generally to the Executive Branch with respect to withholding information, privileges ultimately dependent on the separation of powers doctrine. In addition, Congress has specifically recognized the secrecy essential in the operation of Central Intelligence by providing in the National Security Act of 1947 that the Director "shall be responsible for protecting intelligence sources and methods from unauthorized disclosure." In the Central Intelligence Act of 1949, noting again this responsibility of the Director, Congress exempted the Agency from any law which requires the disclosure of the organization, functions, names, official titles, salaries, or numbers of personnel employed. Other statutes exempt the Agency from requirements to file certain information reports.

[12] *Totten Adm'r v United States;* 92 US 105 (1876).

[13] *Chicago and Southern Airlines, Inc. v Waterman Steamship Corporation;* 33 US 103 (1948).

Pursuant to the Director's task of safeguarding intelligence information, Agency regulations governing the release of information serve notice upon employees that unauthorized disclosure is a criminal and an administrative offense. A criminal prosecution for unauthorized disclosure can be instituted against an employee under several statutes, including the Espionage Laws, or administrative sanctions including discharge can be applied against him.

Central Intelligence is also subject to the provision of Executive Order 10501 that "classified defense information shall not be disseminated outside the Executive Branch except under conditions and through channels authorized by the head of the disseminating department or agency." This provision, although it has never been tested in the courts, gives the Director added support in controlling the release of information to the courts and Congress as well as to the public. He can and will upon request release information of no security significance to the courts or Congress; he can exercise discretion in the release of information produced by and concerning the CIA; but there are limitations on his authority over information originating in other departments, joint interagency documents, and personnel security information. If the decision whether to comply with a demand for information cannot be made at the Director's level, it is referred to the National Security Council.

CIA's position vis-a-vis the courts and Congress is unique beside that of other agencies, because of the recognized secrecy and sensitivity and the connection with foreign affairs possessed by the information with which the Agency deals. This position has been tested on several occasions.

Intelligence and the Courts

The secrecy of intelligence employment which the Supreme Court recognized in the Totten case on the Loyd-Lincoln contract over eighty years ago is basically unchanged today. The difficulties encountered in the courts by a person claiming pay for secret work allegedly performed for the Government were illustrated in the Gratton Booth Tucker case in 1954. Tucker alleged that he had performed services "under conditions of utmost secrecy, in line of duty, under the supervision of agents

of the United States Secret Service and of the C.I.D. of the Armed Services and Department of Justice, FBI and of the Central Intelligence Agency." He claimed that from 1942 to 1947 he contributed his services voluntarily and "without thought of compensation in anticriminal and counterespionage activities in Mexico and behind the lines in Germany," and that in 1950 he was assigned to Korea. For all this he brought suit against the United States in the Court of Claims, seeking payment of $50,000 annually for the years he worked and of $10,000 as expenses. On the very basis of these allegations, and without going into the matter any further, the court refused recovery, citing the Totten case as authority.[14]

Another aspect of the Government's privilege not to disclose state secrets in open court was decided several years ago by the Supreme Court in the Reynolds case. This was a suit for damages brought against the Government by the widows of three civilian observers who were killed in the crash of a military plane on which they were testing secret electronic equipment. The Air Force refused to divulge certain information which the widows thought necessary to their case, stating that the matter was privileged against disclosure pursuant to Air Force regulations prohibiting that reports be made available to persons "outside the authorized chain of command." The Air Force then made a formal claim of privilege, affirming that "the aircraft in question, together with the personnel on board, were engaged in a highly secret mission of the Air Force." An affidavit by the Air Force Judge Advocate General asserted further that the material could not be furnished "without seriously hampering national security." The Supreme Court accepted the Air Force argument, saying that "even the most compelling necessity cannot overcome the claim of privilege if the court is ultimately satisfied that military secrets are at stake." And these Air Force statements had been sufficient to satisfy the court of the military secret involved.[15]

The privilege of withholding national security information from the courts has been subject to some limitation. One case, *U.S. v Jarvinen*,[16] illustrates that this executive privilege is not

[14] *Gratton Booth Tucker v United States;* 127 Ct. Cl. 477 (1954).

[15] *United States v Reynolds;* 345 US 1 (1952).

[16] *United States v Jarvinen;* Dist. Ct. Western District of Washington, Northern Div. (1952).

judicially inviolable. Jarvinen was a casual informant in the United States who gave information in 1952 to CIA and later to the FBI that Owen Lattimore had booked passage to the USSR. He later informed CIA that he had fabricated the whole story. Soon thereafter Jarvinen was indicted for making false statements to government agencies. At the trial a CIA employee called to testify by the Department of Justice prosecutor was directed by CIA not to answer. The witness' claim of privilege was not accepted, however, and when he refused the court's order to answer he was held in contempt and sentenced to fifteen days in jail. He was pardoned by the President.

The CIA argument had been based on the provision of the CIA Act of 1949 that the Director "shall be responsible for protecting intelligence sources and methods from unauthorized disclosure" and on Executive Order 10290, then in effect, which limited dissemination of classified security information. The court had reservations about the substantive merits of the privilege, and the widespread publicity emanating from the case apparently vitiated the claim of need to protect sources and methods. It was the further opinion of the court that in a criminal prosecution the Government must choose either to present all the pertinent information, regardless of its sensitivity, or to risk dismissal of the case by not presenting any sensitive information at all.

There have been several instances of indirect Agency participation in court cases, usually when employees have been requested to furnish documents or testify on behalf of the Government or private parties. In recent cases in which other Government agencies have participated there has been a cooperation between them and Central Intelligence representatives which was lacking in the Jarvinen case, and little difficulty has been encountered with respect to the privilege of withholding classified information. A good example is the Justice Department's prosecution of the case against Petersen,[17] an employee of the National Security Agency who had passed NSA documents to the Dutch. The Justice Department needed to present classified information to the court in order to substantiate its case, but the Director of Central Intelligence advised, in

[17] *United States v Petersen* (E. D. Va. Criminal No. 3049, January 4, 1955).

the interest of security, that a particular document not be used. The Justice Department accepted this recommendation and succeeded in convicting Petersen on other evidence.

CIA and Congress

CIA's record of cooperation with congressional committees has on the whole been satisfactory. The Agency certainly recognizes that Congress has a legitimate interest in some intelligence information and obviously a better claim on it than say the private citizen who needs it for purposes of litigation. Although, under the separation of powers doctrine, intelligence gathering and production is an executive function and the responsibility of the Executive Branch, the Congress does have responsibilities in the foreign affairs field. It is, moreover, the appropriating authority for Agency funds, and indiscriminate withholding of information could not only result in a poorly informed Congress but also jeopardize the good will the Agency enjoys with it. Within the bounds of security, therefore, CIA has attempted conscientiously to fulfill requests from Congress proper to the legislative function. And Congress, for its part, has so far respected CIA's decision to withhold information or produce it only in closed session with the understanding that it is not to be released.

If summoned by a subpoena to testify before a Congressional Committee, all CIA employees, including the Director, are required to appear or be held in contempt of Congress. There are few instances, however, in which an employee has been subpoenaed to testify involuntarily, and no documents have ever been released to Congress without the Director's approval. In most cases it has been as a matter of form or at Agency request that an employee's testimony has been called for and a subpoena served. In only two instances situations have arisen which led to strained relations between the Agency and congressional committees. When Agency testimony was desired by the Senate Internal Security Committee concerning the security status of John Paton Davies, CIA successfully requested several delays in the hearings on security grounds. And in 1954, while the Senate Committee on Government Operations was considering inquiring as to certain facts relating to the security status of an Agency employee, counsel for the Committee and the General Counsel of CIA agreed on the

legitimate interests of the Agency and the Committee. The employee was never questioned by the Committee.

No court cases have defined an employee's rights to withhold from Congress information which has been classified and the divulgence of which could work harm to this country's intelligence program. Such a case could theoretically arise through testing a Congressional contempt citation in a habeas corpus proceeding, but it is unlikely that such a test will be made. The employee could use an order from the Director as a basis for not testifying, and the Director's judgment has always been respected by the Congress when he has decided he cannot reveal certain information. Because the information which CIA has is so clearly within the purview of the Executive Branch, this Agency has a much stronger legal basis for refusal than other departments have.

If Congress should persist, there would of course have to be eventual Presidential support for continued refusal to give information. Such support was tendered, outside the intelligence and foreign fields, in 1909 when Theodore Roosevelt withstood a Senate resolution calling for certain papers in the Bureau of Corporations concerned with the absorption by U.S. Steel of another corporation. Roosevelt informed the Senate that he had obtained personal possession of the papers it desired but that the Senate could get them only by impeachment. "Some of these facts which they [the Senate] want," he declared, "for what purpose I hardly know, were given to the Government under the Seal of Secrecy and cannot be divulged, and I will see to it that the word of this Government to the individual is kept sacred." [18]

Generally, there has been a spirit of cooperation between the Legislative and Executive Branches. In those cases where a conflict has occurred, and the Executive has refused to divulge information requested even in the strongest terms by the Legislature, the decision of the Executive has prevailed. The Constitution has been in existence for over 170 years and under it 34 Presidents and 85 Congresses have forged a strong interpretation of the separation of powers. In the field of foreign affairs intelligence, the Director of Central Intelligence, acting

[18] *The Letters of Archie Butt, Personal Aide to President Roosevelt;* by Abbott, pp. 305–06.

under the constitutional powers of the Executive Branch of Government together with powers granted by statute, can withhold such information as he believes is in the best interests of the United States. If a showdown were to occur, however, the issue is between the President and Congress as to whether classified information should be divulged against the wishes of the Director, who is responsible for the protection of sources and methods. Historical precedent in similar situations appears to favor the President.

A recent article in STUDIES *provokes here a second attempt to sort out a tangled concept.*

A DEFINITION OF INTELLIGENCE

Martin T. Bimfort

Formulating a brief definition of so broad a term as intelligence is like making a microscopic portrait of a continent, and the product of this effort is likely to have less value than the process of arriving at it, the reexamination of our own thinking as we seek to pinpoint the essentials of the concept. Yet misunderstandings within and without the intelligence community often result from incompatible understandings of the meaning of the word *intelligence.* Moreover, the assignment and coordination of functions, responsibilities, and relationships among the members of the community must rest upon an agreed interpretation of this word in the laws and directives which govern our work.

Definitions carefully formulated by intelligence experts do exist, but all seem deficient in one respect or another; the concept remains as sprawling and thorny as a briar patch. Each expert tends to view the term through the spectacles of his specialty. Military intelligence officers speak of enemies and areas of operation, defining *operation* as a military action or the carrying out of a military mission. The collectors of information are inclined to regard its further processing as a kind of frosting, a matter of arrangement and decoration. The agent handlers tend to lose sight of the end in the wildwood of the means. The producers of finished intelligence, cutting their cloth far from the smell of sheep dip, are likely to disregard both the raw materials and the methods by which they are obtained. Like the services within the intelligence community, these specialists within services need common definitions as bridges toward unanimity.

A definition recently proposed by R. A. Random [1] is here compared with three others. After discussing them we shall, with human temerity, propose yet another.

[1] Intelligence as a Science," *Studies in Intelligence,* Vol. 2, No. 2 (Spring 1958), page 76.

1. Webster's *Unabridged* (1956)
   "Intelligence. 5. The obtaining or dispensing of information, particularly secret information; also, the persons engaged in obtaining information; secret service."
2. *Dictionary of United States Military Terms for Joint Usage* (Revision of February 1957)
   "Intelligence — the product resulting from the collection, evaluation, analysis, integration, and interpretation of all available information which concerns one or more aspects of foreign nations or of areas of operation and which is immediately or potentially significant to planning."
3. *A Training Handbook*
   "Intelligence=The product resulting from the collection, evaluation, collation, interpretation, [and] analysis of all available information concerning the intentions, capabilities and objectives of other countries which are significant to a government's development and execution of plans, policies, decisions, and courses of action."
4. *Mr. Random*
   "Intelligence is the official, secret collection and processing of information on foreign countries to aid in formulating and implementing foreign policy, and the conduct of covert activities abroad to facilitate the implementation of foreign policy."

Definitions 2 and 3 consider intelligence solely a product. Definitions 1 and 4 recognize that intelligence is also a process, but they contain other inadequacies. All four omit counterintelligence, a deficiency which is like that entailed in explaining an automobile in terms of its motor without reference to its bumpers or brakes.

Webster's definition is clearly not exclusive enough for our purposes. There is much obtaining and dispensing of information, even secret information, which has nothing to do with intelligence as we use the term. The second and third definitions list whole series of overlapping concepts in an effort to include everything, yet exclude the essential concept of process. With Webster, they likewise ignore not only counterintelligence but also political action and covert propaganda, although

these activities are conducted by intelligence organizations in accordance with directives based on law.

Mr. Random's definition avoids all but one of these pitfalls, but has weaknesses of its own. First, in the phrase "the official, secret collection and processing of information on foreign countries," the adjective *official* is proper to the processing of intelligence but not always applicable to its collection. The acquisition of intelligence is normally performed for a government, but the act of acquisition is sometimes highly unofficial. Secondly, although secrecy is critical to intelligence, it is not a universal attribute. There is overt reporting by representatives abroad, overt processing of overt materials, overt disclosure of finished intelligence. Thirdly, intelligence is not confined to information on foreign countries; witness FBI reports on the CPUSA. This last difficulty can be solved, if the term *agent* is understood to mean any person or group who serves the interests of a foreign state, by adding the words "and their agents" after "foreign countries."

Mr. Random states the purpose of intelligence as "to aid in formulating and implementing foreign policy." But intelligence may aid in determining domestic policies for national security as well: the inauguration of a program for civil defense, for example, or stepping up the national development of space satellites.

The final element in the fourth definition, "the conduct of covert activities abroad to facilitate the implementation of foreign policy," comes close to the mark. It should be made clear, however, that "covert" as here used does not mean "secret," in the sense that the activities are hidden, but rather "non-attributable," in that the government's responsibility for these activities is not disclosed.

The omission of counterintelligence from the fourth definition, as from the others, is the more surprising in that counterintelligence is a part of intelligence not in an architectural but in an organic sense. The counterintelligence elements of the intelligence bloodstream are the white corpuscles and antibodies. It is true that our emerging definition has taken some informational aspects of counterintelligence into account by including "information on foreign countries *and their agents,*" but we must also cover the aggressive and defensive measures

which intelligence takes to protect its activities and products. Adding this element to our definition, we rest our case on a triad (positive intelligence, political action, counterintelligence) with threefold application (to process, to product, to agency).

Intelligence is the collecting and processing of that information about foreign countries and their agents which is needed by a government for its foreign policy and for national security, the conduct of non-attributable activities abroad to facilitate the implementation of foreign policy, and the protection of both process and product, as well as persons and organizations concerned with these, against unauthorized disclosure.

CRITIQUES OF SOME RECENT BOOKS ON INTELLIGENCE

CENTRAL INTELLIGENCE AND NATIONAL SECURITY. By *H. H. Ransom.* (Cambridge: Harvard University Press. 1958. Pp. 272. $4.50)

This is the best study that has been written on the development, organization, and problems of the US intelligence business. The author declares that his goal is "to describe contemporary central intelligence insofar as this can be done from nonsecret sources." This goal he has admirably attained; it is remarkable indeed how much can be learned from "nonsecret" sources if they are industriously and skillfully used. The tone of the book is throughout temperate and scholarly. The reader will find an excellent brief discussion of what intelligence is, and of how it is supposed to operate. He will find good summary accounts of the history, functions, and present organization of all the IAC member agencies, and of CIA itself. Curious outsiders will learn a good deal that is new to them, and students in CIA training courses will find this an excellent textbook.

To a great — perhaps excessive — degree the story centers about National Intelligence Estimates. Partly, no doubt, this is because the existence of these estimates and the general manner of their production is no secret. But partly it is because the author entertains the highest notion of their significance. "No development in American governmental institutions in recent years is more important than the evolution of the mechanism for producing the National Intelligence Estimate," he says. This mechanism is accurately and quite fully described. And there is much explanation of why successful policies can only be made on the basis of good information and sound estimates.

But the author runs into trouble when he attempts to say how good National Intelligence Estimates really are. Even if he had been given all the texts of all the estimates he would not have found it easy to arrive at a judgment of their validity.

As it is, the best he can do is to quote people like Admiral Radford, who says that we always overestimate the strength and capabilities of the Soviets, and other people like Joseph Alsop, who says that we always underestimate them. The reader will not be much wiser after such quotations; indeed he may well wonder why Alsop should be cited at all as an authority on the subject.

Then the author worries about the dangers of "intelligence by committee" — the perils of a watered-down consensus. He fears that there may not be enough weight given to variant opinions. "On the most important of questions," says he, "is likely to be found the greatest variety of dissenting views." This is a commonly held notion, which the present reviewer believes to be false. The fact is that there is not often much difference of opinion in the intelligence community on "the most important of questions" — it is on the less important that argument is most apt to be sharp. Indeed, most of the time devoted to coordinating the text of Estimates is spent in adjusting relatively minor matters of emphasis, phraseology, and the like. When there are firmly held differences of view on a truly important question, nobody desires to minimize the matter or to suppress a dissent by watering down the collective judgment.

A great deal hangs on the confidence and firmness with which an intelligence estimate is rendered, whether as a consensus or as a dissent. If a firm judgment is given, it may be sufficient by itself to determine US policy. But intelligence estimators would be irresponsible if they gave a firm judgment when the evidence did not warrant it. They would in effect be making a policy decision in the guise of intelligence, and they ought not to do this. It seems to me that the author of this book, along with others who decry the "watering down" of intelligence estimates, misses this point. He gives intelligence estimators no credit for honest doubts, or for decent intellectual humility in the face of insufficient evidence. He is clear, however, in his caution that intelligence estimators must base their differing opinions strictly on the evidence, and not upon extraneous political or budgetary considerations.

The author's discussion of the relationship between intelligence and policy is always interesting, and sometimes downright alarming. Policy-making, says he, is a dynamic process,

and a key element in it is the information available. The man or group controlling information thus to a degree controls policy. If knowledge is power, he remarks, CIA through an increasing efficiency has come to play a major role in national security policy.

He goes yet further. CIA, he says, will probably increase its influence, simply because increasing centralization of power and of function is more or less inevitable in the modern age. At some time or other the policy-making elements in the Executive and Legislative branches of the government may reach an impasse. When that day comes it may be that CIA will constitute a "third force" within the Executive Branch, and successfully espouse its own foreign-military policy. This horrendous prospect disturbs the author a little, and is one reason why he favors the appointment of a Congressional Committee to oversee the operations of CIA in the way suggested by Senator Mansfield.

Despite these fears, the author sketches out a considerable extension in the traditional activities of intelligence. Too little attention has been given, he says, to the discovery of factors by which the United States may influence the future. There has been too little Basic Research, and too much accumulation of facts. "The whole intelligence enterprise tends to focus upon the filling of a vast warehouse of encyclopedic data." And again, "too little regard is shown generally to theory, reasoning, or the inductive method." Be it so, but an increasing mastery of these methods, and an increasing weight of product from them, might in the long run make CIA virtually an arbiter of policy. Myself, I doubt that we shall ever be wise enough to reach that position on the "most important questions."

The foregoing observations are directed to some points raised in the last chapter of the book under consideration. Primarily the book is descriptive, not argumentative; it deals with the intelligence mechanism as it exists, and eschews theory. There is an excellent apparatus of footnotes, and a lengthy critical bibliography. Altogether this is a major work in our field, and one to be warmly welcomed.

ABBOT SMITH

C. I. A. By *Joachim Joesten.* (Munich: Isar. 1958. Pp. 192. DM 12.80.)

Two distinct and somewhat ill-fitting Parts make up this book by the German-born U.S. journalist Joesten, and the less valuable of the two has imposed its title upon the composite. Part II, "[Episodes] from the Duel between the [Soviet and U.S.] Clandestine Services," is devoted almost entirely to the story of two Soviet spy rings in the United States, the one centered on Jack Soble and the one headed by Colonel Abel. These stories the author puts together from public sources, chiefly the indictments against the principals and their own published testimony and statements.

In this Part Joesten adheres, if somewhat loosely, to his documentary sources, employing literary license mainly to endow his characters with personality and play them through his pages with dramatic finesse. The reader feels he has got personally acquainted with Martha Dodd Stern, Jack and Myra Soble, George and Jane Foster Zlatowski, the ignoble hero Boris Morros, Colonel Rudolph Abel, the degenerate Reino Hayhanen, Sgt. Roy Rhodes, and their supporting casts — at least he has got acquainted with the Joesten characters representing them — and finds himself emotionally involved in their adventures. There is probably not another so readable account of these two espionage nets extant.

To these stories of Soviet spying Joesten adds a weak afterbalance in a chapter on Soviet public exposure of U.S. spies, and finally he describes, by way of wry comic epilogue, the battle fought among U.S. agents over the defectors Barsov and Pirogov at "The Three Musketeers" restaurant in Washington. Part II logically includes also the book's *Vorspiel,* staging the scene in which USAF Captain French "lost the biggest gamble of his life" when his flier offering the Soviet Embassy nuclear weapons data found its way to the FBI.

Part I, which gives the book its title, purports likewise to rest on open documentary sources, or at least public information, in its description of CIA's organization and activities; but here Joesten has either used his sources too uncritically or embroidered on them too freely. Interwoven into a generally sound synthesis of what is publicly known about the Agency are extravagances and misinformation like the following:

> The most minor CIA official gets a salary which would look like a golden dream come true to the best paid of freelance journalists. . . .
>
> CIA has a language school at its disposal . . . [where] hundreds of young men and women sit . . . learning little-known Soviet languages like Azerbaidzhani. . . . Beginners learn in six to eight weeks to read *Pravda* fluently and monitor Radio Moscow. . . . Compulsory for all [new CIA employees] is the Russian language and in addition one other Soviet Bloc language. . . .
>
> It can be stated without exaggeration that any person who is in any way in the public eye in any country today is under CIA surveillance. . . . All his activities, the good and bad aspects of his character, his financial involvements, the company he keeps, his sex life, his habits (especially drink and drugs) — everything is down in his file. . . .
>
> By and large . . . the daily CIA report to the President is based chiefly on information from secret agents in the adversary's territory, while the much more comprehensive weekly and monthly reports contain predominantly material . . . distilled from newspapers, periodicals, books, radio broadcasts, etc. . . . The Office of National Estimates issues a weekly review of the U.S. international political and strategic position . . . wherein the development of American nuclear might is weighed against the country's vulnerabilities. . . .
>
> Within the CIA Operations Branch is a special section . . . called by the initiated the "Department of Dirty Tricks." In the usual abbreviation of this name, DDT, lies an unintentional but nevertheless neat pun. . . .
>
> "AWD," as the chief is called orally and in writing by his subordinates, . . . is not easily upset and almost never makes a public statement. . . . He called together 500 of his main supervisors and declared, "Anyone who gives McCarthy any information will be dismissed on the spot." . . .
>
> If a CIA employee has an accident, no ordinary doctor can be called, nor can the injured man be put into a hospital to which the general public has access. . . . If he dies, no coroner's examination can be made, no death certificate can be issued, and no burial in an ordinary cemetery can take place. . . .

Joesten's book was criticized for German readers on 22 May of this year by another journalist, the Washington correspondent of the Hamburg *Die Welt,* Herbert von Borch, as "amateurish" and written with a "cheap sensationalism" which misrepresented the facts about CIA operations. Von Borch's heavy-handed attack was apparently inspired, however, not so

much by misrepresentations like those cited above as by the central theme which serves to integrate Joesten's two dissimilar Parts — namely, that the necessary secrecy of intelligence operations creates an unchecked center of power in the U.S. Government which poses a potential threat to Western democracy.

Joesten bolsters this warning with authorities — Senator Mansfield's "If secrecy becomes inviolate, it will lead to abuse"; the *New York Times*' "As things stand now, CIA is in practice above the law. . . . No one in Congress knows whether . . . it is in the process of establishing a bureaucratic world government, . . . whether it perhaps arrogates to itself the determination of U.S. foreign policy"; Senator Morse's declaration that the organization in its present form is incompatible with the U.S. constitution; Senator Mansfield's fear that "the whole system [of checks and balances] may break down and the door be opened wide to tyranny." [1]

Joesten himself realizes that his warning may be misinterpreted. He writes in a postscript:

> One should not conclude from the fact that the American clandestine services now show an ominous similarity with the Russian ones that the United States and the Soviet Union are spiritual twins.. . . America remains, in spite of its all too frequently evident blemishes, . . . a country in which the freedom and dignity of the individual is guaranteed by its constitution. . . .
>
> But. . . the showdown with the East must be held in the ideological arena. I have indicated to what extent the United States . . . has taken up the weapons of the cold war. The reader . . . can see how dangerous these weapons . . . could become if ever the essence of the contest lost its ideological character. . . . Every war is a thing of evil, including the "cold" war, a craft which may easily get out of hand. . . .

PHILIP K. EDWARDS

BURMA DROP. By *John Beamish*. (London: Elek Books *and* Toronto: Ryerson. 1958. Pp. 222. 16/–.)

This autobiographical account of espionage and guerrilla activity in the Japanese-held Burma jungles is unfolded by its

[1] All citations in this paragraph are retranslations out of Joesten's German rendering.

Anglo-Burmese author in a cultured British prose sometimes incongruous with the dashing, adventure-happy flavor which it has in common with other tales of OSS exploits around the world. As a matter of fact Beamish, presumably out of respect for his secrecy oath, delicately avoids implicating the OSS in the Burmese operations he details. He gives his employer as British Force 136, describes his fellow-agents as though they were all British, and acknowledges the existence of American operations only in picturing his chance encounter with a colorful lone Texan whose extravagant personal equipment was suggestive of the White Knight's mad miscellany.

This reticence with respect to his true employer prevents him from telling the reader that his first mission, to which he devotes about half his book, was one of the two or three early successes which convinced General Stilwell and local Army headquarters that OSS Detachment 101 deserved full support and a fair share of the scarce means and materiel available in the theater. The ten-man party with which Lt. Beamish made his first parachute drop, in February 1943, blew up bridges in the Myitkyina area along the Japanese supply route from Mandalay and then spent several months investigating conditions in northern Burma and sending back intelligence reports by radio before making its way to Fort Hertz via the Triangle.

Beamish, the records indicate, did leave Detachment 101 after this mission, in mid-1943, and the other two missions he describes were presumably carried out under the auspices of Force 136, whose operations were more or less coordinated with those of the OSS. At any rate these two later assignments of the author coincide in character with the two emergent phases of Detachment 101's developing activity — during most of 1944 a concentration on the gathering of intelligence by espionage teams, and in 1945 the organization and direction of guerrilla warfare with irregular forces, largely Kachin, which came to number as many as 10,000. Beamish' second mission was devoted to determining the vulnerability of the ferries along the Salween boundary between Japanese- and Chinese-held territory and to assessing the strength of local defense forces and possibilities for guerrilla recruitment. The active guerrilla warfare phase of operations began for him in January 1945 when he was parachuted down to a guerrilla center being organized near Lashio. Highlights of this mission were the res-

cue of a Shan chief, along with some sixty members of his household, from Japanese internment, and the routing of Japanese regulars attacking an airstrip.

Burma Drop illustrates authentically the tradecraft of jungle operations; but the reader will probably remember it best for the author's love of his green Burmese forests, his warm affection for the Kachins, his nostalgia for the timber camp and its elephants who courageously "lifted" the refugees of 1941 into Assam, and his melancholy acquiescence to the passing of a gracious colonial era.[1]

RICHARD K. SHABASON

[1] Another member of Detachment 101 is the author of a new novel about the OSS in Burma — Dean Brelis' *The Mission* (New York: Random. 1958. $3.50). Brelis' story is fictitious and contains little tradecraft, but in terms of human experience and appreciation of the Kachins his book is a more moving one than *Burma Drop*.

Articles and book reviews on the following pages are printed without classification and without identification of the writers, for the convenience of readers who may wish to detach them from the classified body of the *Studies*.

COUNTERINTELLIGENCE FOR NATIONAL SECURITY

In 1949 Sherman Kent introduced a triplicate framework within which to consider the subject of intelligence — *i.e.*, as *knowledge*, as *activity*, and as *organization*.[1] This article will proceed within that framework to discuss counterintelligence, a field of intelligence.

Inevitably it sounds a bit illogical to call counterintelligence a type of intelligence, for we aboriginally think of intelligence as knowledge, and counterintelligence as an activity or organization acting against forces seeking such knowledge. Yet members of the intelligence community will agree that we must produce counterintelligence information (knowledge) as well as take counterintelligence measures (activity) and devote personnel to these duties (organization). This threefold parallel view of counterintelligence gives it a unity which obviates the use of a number of makeshift terms invented in the past for some of its aspects.

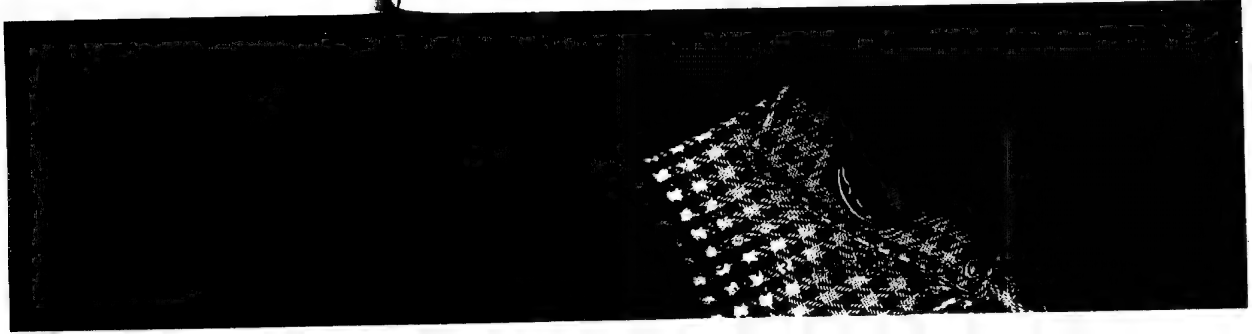
Counterintelligence as Knowledge

Counterintelligence is the knowledge needed for "the protection and preservation of the military, economic, and productive strength of the United States, including the security of the Government in domestic and foreign affairs, against or from espionage, sabotage, subversion and all other [similar] illegal acts designed to weaken or destroy the United States." [2]

Since the "military, economic, and productive strength of the United States" is linked with the security of many far-flung installations and may be affected by activities originating almost anywhere in the world, the amount of counterintelligence information needed is vast, and it must be produced both within the United States and in all the foreign areas to which U.S. interests extend. Kent dichotomized counterintel-

[1] *Strategic Intelligence* (Princeton, 1949), page ix.

[2] From the definition of "national security" proposed in the *Report of the Commission on Government Security* (Washington, D. C. 1957), pp. 48–49.



ligence by location, as *security intelligence — domestic* and *security intelligence — foreign;*[3] but since essentially the same type of counterintelligence information may be required from Little Rock as from Okinawa, Iceland, Spain, or West Germany, and since it is produced domestically and abroad in the same way, a division by geographical source does not seem useful for conceptual purposes.

Counterintelligence as Activity

The activity of counterintelligence is the production of knowledge, and as with all intelligence, this knowledge is not produced for the counterintelligence organization itself (except as parts of it are instrumental in the further production of knowledge[4]) but ultimately for others — the prosecutors, legislators, commanders, and executives who are responsible for administering security measures. We should clearly distinguish between counterintelligence activities and security measures, for there is a tendency to treat them with unjustified synonymity. Security measures are defensive devices applied by the executive as protection against the things which counterintelligence seeks knowledge of.[5] They relate directly to the item to be secured, denying or inhibiting access to particular information, material or areas. A representative grouping of types of security measures follows:

Information Control	Physical Security	Area Control
Security clearances	Fences	Restricted areas
Locking containers	Lighting	Curfews
Security education	Guard systems	Checkpoints
Document accountability	Alarms	Border and frontier control
Censorship	Badges and passes	
Camouflage		

[3] *Op. cit.*, pp. 210–211.

[4] These parts are indicated in such statements as, "The FBI conducts two types of security investigations — one to uncover admissible evidence to be used in the prosecution of an individual or group in federal court, the other for intelligence purposes only." (Whitehead, *The FBI Story*, New York, 1956, p. 339.)

[5] "Security measures — measures taken by a command to protect itself from espionage, observation, sabotage, annoyance, or surprise" — *Dictionary of U.S. Military Terms for Joint Usage.*

Security measures may be taken on the basis of counterintelligence knowledge, but the function of the counterintelligence activity proper is simply the production of knowledge — knowledge concerning the plans, operations, and capabilities of organizations intent upon subversive activities. "Subversive activities" is used here for convenience in a broad sense, to include espionage, sabotage, and related actions.

These activities are defined in our federal statutes. Chapter 115, Title 18, U.S. Code, "Treason, Sedition, and Subversive Activities," describes certain crimes, such as seditious conspiracy, which constitute subversive activity in the sense that they aim at the overthrow of the government. Other statutes particularize espionage as a number of activities including even gross negligence in the handling of national defense information. However, the essence of espionage as a practical threat to our national security is revealed by major U.S. court cases to lie in the clandestine and illegal collection of secret information on behalf of another country. The counterintelligence organization has little or no control over the vast amount of information available to foreign countries through legitimate overt sources.

Sabotage is described in our statutes as the willful destruction or defective production of war or national-defense matériel.[6] It can embrace the work of cranks or vandals disassociated from any foreign or revolutionary power, but as a practical threat to national security, sabotage is a clandestine and illegal activity on behalf of a foreign country which, unlike espionage, is likely to be limited to periods of actual or threatened armed hostilities.

Certain kinds of activity, however, which are not made criminal by law are nevertheless objectives of counterintelligence. Subversive elements may and do operate under a blanket of constitutionality in their effort to weaken the fundamental loyalties that are the real support of a government of law. To what extent this legal subversion, designed to disaffect the citizenry from its government, must be tolerated for the sake of preserving individual freedoms is the province of the legislative and judicial experts in constitutional law. But the counterintelligence organization counters this legal sub-

[6] See Title 18, U.S.C., Chapter 105.

version as well as criminally subversive activity in that it seeks to produce knowledge of the details of both.

Counterintelligence knowledge may fail to support action before the courts for any of a number of reasons — the provisions of the Statute of Limitations, technical defects in the statutes, the inadvisability of exposing confidential informants or techniques, or because the subversive activity has not progressed sufficiently toward its intended end to constitute a crime. If it is not judicially competent, this knowledge may still be used profitably by counterintelligence as a lead to further investigation, by the executive as the basis for new security measures, or by the legislature in blocking loopholes in the law.

Our description of counterintelligence activity has included the traditional elements of counterespionage, countersabotage, and countersubversion.[7] The list of particulars might be extended by adding countersedition and countertreason, for example, as other subdivisions of counterintelligence activity. But these divisions are rather artificial ones, for the processes by which knowledge of espionage, sabotage, sedition, treason, subversion, etc. is secured are all the same.

The identification of subversive activities, that is the production of counterintelligence knowledge, is carried out in three overlapping phases — detection, or the recognition of some actual or apparent evidence of subversive activity; investigation, or finding out more about this evidence; and research and analysis, which puts the information into such order that some use may be made of it. The techniques of investigation and research have been written of at great length, but three groups of detection techniques are worth noting here.

The first of these may be characterized as surveillance, understood in a broad sense to include the screening of refugees, the monitoring of communications, personnel investigations, and the scrutiny of the press or other news media (for detection, not for censorship). It also includes observation of known subversive outlets and the use of informants wherever they may be productive.

[7] Farago uses exceptional nomenclature in an attempt to distinguish between security and counterintelligence measures. He groups security intelligence, counterintelligence, and counterespionage as activities under the general heading of negative intelligence. (Ladislas Farago, *War of Wits*, New York, 1954, p. 271.)

Another technique of detection is, surprisingly, publicity. Through publicity the loyal citizenry is made aware of the danger of subversive activities, is taught ways to recognize them, and learns the identity of counterintelligence agencies to which it may turn. Defection programs make use of the publicity device, and immunity statutes assist its effectiveness. Prudence is of course required in the exercise of this technique.

A third method in detection is liaison, through which counterintelligence agencies are afforded each other's cooperation and that of other public and private agencies in order to maximize their range of observation for evidence of subversive activity or legal subversion.

The use of these techniques and the whole process of identifying subversive activity must be guided by an analysis of previous efforts. Detection, investigation, and research and analysis are mutually supporting processes. If they are to be effective, they must also be continuing processes, and carried out by skilled personnel.

Counterintelligence as Organization

As organization, counterintelligence consists of the personnel, along with their organized skills and methods and their organized files of data, engaged in these processes that produce counterintelligence knowledge. Since counterintelligence measures must be continuing in order to be effective, there must be a permanency of being for the counterintelligence organization and a background of continuity in its files and in the experience of its field and headquarters personnel.

Ideally, the field personnel should all be skilled in all counterintelligence techniques and fluent in half a dozen languages as well. What is not always fully appreciated is that the counterintelligence expertise is more critical than the language facility. A language weakness can be compensated for, but professional counterintelligence ability is indispensable.

In practice, individual field personnel are likely to be expert in only one or a few of the techniques required, for instance liaison. Others may be expert in research and analysis, the ability to clarify, organize, and make significant the reports of the investigators. Investigators may be specialists in interrogation, shadowing, or the use of technical equipment. These experts, like highly skilled persons anywhere, are likely to be

sensitive and at times temperamental; and supervisory counterintelligence personnel must have the developed professional skill to direct and nurture the talents of their subordinates.

Security and counterintelligence measures are never popular, not even during a hot war. "Whither so much counterintelligence?" and "What price national security?" will be continuing questions. Such questions can be answered by the counterintelligence organizations, in the last analysis, only by the clarity and dispassionate professionalism with which they compile the knowledge necessary for "the protection and preservation of the military, economic, and productive strength of the United States." A high quality in this product will encourage public recognition and the cooperation of loyal citizens, provide incentives for legislation and grounds for judicial action, and guide the executive in the establishment of security measures.

THE MAIL FROM BUDAPEST

This story of pre-war espionage and counterespionage has been summarized from records originating in Czechoslovakia and acquired by American intelligence after World War II. It has all the qualities of a classic except one: it is nearly unknown. It is our purpose here to pull it out, with its still useful lessons, from the shadows of the past.

In 1936 the international situation of Czechoslovakia was worsening steadily. Hostile neighbors stood upon her borders. Three million Sudeten Germans, helped by Hitler, were preparing for armed revolt. Austria was weak, Poland cool toward the CSR, and Hungary antagonistic. Czechoslovak counterintelligence had its hands full.

In the spring of that year Colonel Ujszaszy had been the Hungarian Military Attaché in Prague for two years. The routine surveillance by Czech counterintelligence of all military attachés of hostile countries had until then revealed nothing startling about the colonel. A bachelor, he lived in a villa in Vorechovka, an exclusive residential section of Prague. His hostess and mistress was a young Hungarian beauty. His car was driven by a Hungarian chauffeur. Observation reports pictured him as an easy-going *bon vivant*. His ambition and devotion to duty were not of the flaming variety; their matchflickers went out at the first puff of pleasure. You might have called him a wine-woman-and-song man but that his record did not indicate a taste for music.

His only staff employee was a non-commissioned officer named Kovacs, who shared his superior's tastes: he was a regular visitor at night clubs and various boudoirs. The Czechs now began to work on this man. An intelligence officer struck up an acquaintance with him in a night club and began the slow work of cultivation. During the first two months it was learned only that Kovacs had a wife and two children at home and that he spent money too freely. One evening, however, when the darkening night was as soft with spring as Kovacs was with drink, his Czech friend tried to draw him out about his daily work.

"Work?" repeated Kovacs, looking as though he had found a fly in his glass. "There's almost nothing to do, except buy

some stamps for the colonel every other Friday. Don't know what he wants with Czech stamps. He's probably writing love letters."

The Post's Appointed Rounds

Czech intelligence grew curious about these stamps. It knew that the diplomatic courier from Budapest arrived in Prague every other Friday, a fact which might well be more than coincidental. It decided to test the hypothesis that letters brought by the courier were mailed by the Hungarian attaché to addresses inside Czechoslovakia, possibly to agents of Hungarian intelligence.

The obvious thing to do was to intercept any such letters, but here the Czech service ran into a legal wall. The secrecy of private correspondence in time of peace was guaranteed by law in the Czechoslovak Republic. It was necessary to obtain the consent and cooperation of the highest postal authorities. The fact that the ostensible sender was an accredited diplomat did not make the problem easier. Reluctantly the Czech service decided to take into its confidence the Director General of the Central Office of Post and Telegraphs, the equivalent of the U.S. Postmaster General.

This gentleman listened coldly at first. But when a senior intelligence officer unfolded the story of manifest danger to the country, he agreed in the end that national security would have to take precedence over national law. He insisted that the first interception be conducted with extreme care, because this illegal act, necessary to determine whether the letters were innocent or not, would be the basis for all that might follow. He also laid down the following stipulations: (1) the letters were to be picked up only from the box or boxes into which they were dropped; (2) the interception had to take place immediately after the letters were posted; (3) no postal employee would be involved in such a flagrant violation of postal regulations. The postal director agreed to provide a postman's uniform and a master key which fitted all mail boxes in the country, and he did not demur when he was told that the results of the operation, if successful, could not be divulged to him.

Meanwhile the chief of Czech counterintelligence was considering the many ways in which Colonel Ujszaszy could post

his mail. He could drop them into the box nearest his embassy. He could scatter them in boxes all over Prague. He could mail them in the countryside, from various remote areas. He might have an accomplice — his mistress, for example — post part or all of the letters. And they could be mailed at any time, on any date. Yet it was essential, in order to prevent suspicion on the part of the addressees, to recover, process, and remail them on the same day and from the same mailbox. The best of the Czech experts would have to be available for opening, photographing, testing for secret writing, and re-sealing.

To cover all contingencies the following orders were issued:

(1) The Hungarian courier, upon his arrival at the Central (Wilson) Railroad Station on the following Friday, was to be placed under surveillance. The Czechs already knew that he invariably travelled from station to embassy in a diplomatic car, but they were taking no chances. He would be followed to the embassy. Surveillance would continue if he deviated from the established pattern.

(2) Beginning that same afternoon, a special squad of handpicked surveillants, with two cars at their disposal, was to watch Colonel Ujszaszy's every move. Here too the Czechs showed professional caution. The train which the courier had taken heretofore would not arrive until just before Friday midnight, but there was always the chance that he would appear early this time. There was also little chance that the letters would be mailed until the next day: in Czechoslovakia, as in the rest of continental Europe, Saturday was a working day, and Ujszaszy would not need to beat the weekend. Just the same . . .

(3) Lighter surveillance was to be maintained for the mistress, the chauffeur, and even for the non-com, Kovacs. Of course it was improbable that Kovacs, in blurting out the story of the stamps, would have concealed the related chore of mailing the letters. But the Czechs were aware that it is usually the improbable that wrecks well-planned operations.

(4) The squad watching Ujszaszy was to keep in close touch with the "postman," who was to approach the box, if possible, even before the letters were mailed, in order to estimate the number of envelopes to be picked up. Members of the surveil-

lance squad would, of course, take all precautions against drawing the attention of the Hungarian attaché.

The courier arrived the next Friday, on schedule. The official automobile picked him up and delivered him at the embassy, on schedule. He stayed there overnight, as usual. Colonel Ujszaszy, smartly turned out, attended a social function that night, as usual. The following morning, keeping to his normal pattern, he showed up about ten o'clock for work at the embassy. And just after eleven he emerged, carrying in his left hand a packet of letters estimated by the watchers as numbering seven to ten. With firm military bearing, looking straight ahead, he crossed the street and dropped his letters in the nearest box. His duty done, he wheeled about and returned to the embassy.

The postman, on the other hand, slouched a little under the weight of his bag, because it was already eleven o'clock. He opened the box with his key, picked up the top twelve letters, and trudged off.

At headquarters it was quickly established that four of the twelve letters were the innocent correspondence of local citizens. But each of the remaining eight oysters, when opened, held its pearl; each was addressed to a Hungarian agent on Czech territory. Even Colonel Ujszaszy, the Czechs reasoned, would not be so incredibly careless with agent correspondence. It followed, then, that he did not know the contents, that he received the letters sealed and posted them without opening. It was also evident that Budapest had provided him with no instructions in the art of mailing letters, or else he had ignored complicated orders concerning what seemed, after all, a perfectly simple, straightforward matter.

The letters were checked for secret writing, photographed, and resealed. The mailman again serviced the box; and at the next appointed time its contents, including the twelve letters so briefly missing, went to the post office.

Surveillance of Ujszaszy and Co. was continued for three more days. No more letters were mailed.

The photographs of the eight letters were examined closely. It was immediately apparent that they were part of a correspondence that had continued for a long time. The addressees were scattered throughout Bohemia, Moravia, and Slovakia.

The subject-matter included acknowledgements of reports received, new instructions for communications channels from an agent's base, firm reminders of unfulfilled assignments, and, ironically, security instructions and safety warnings for the agents. One letter contained a considerable sum of money, of which more later.

Now how to be sure that the Budapest goose kept those golden eggs rolling along? The Hungarian headquarters might revamp its channels to and from its agents in the CSR, by-passing Colonel Ujszaszy. Any such change, fortunately, would become apparent within two weeks. Barring contingencies, however, the continuity and duration of this source would depend upon the discretion of Czech tactics in lifting the letters and exploiting their contents. It was therefore obvious that no agent of the Hungarians could be arrested except on solid evidence unrelated to the Budapest correspondence.

Prudence and Impatience at the Snare

The highest and most difficult art in counterintelligence is knowing how to wait. The Czechs service was good at it. Orders went out that all persons mentioned in the intercepted letters were to be placed under surveillance. The search was not to be confined to indications of espionage; just as important was the uncovering of other illegal activities which would furnish an independent basis for arrest. The Czechs realized that the most important agents probably would not maintain communications through the military attaché in Prague, but would have direct channels to Budapest. It was therefore necessary to follow the eight recipients with care and patience in an effort to learn the identities of bigger fish mentioned in the letters by cover names, or not at all.

This prudent plan was nearly ruined at the outset. The Chief of the General Staff wanted to be informed promptly of the results of the operation, and on the evening of the same Saturday summoned an elderly, senior intelligence official to report. The latter produced the photographic copies of the letters. After the first shock, the general beamed. "Now you can arrest every last one of them!" he exulted. Told, however, of the plan to render the spies harmless without compromising the source of the information, he allowed himself to be persuaded. Then he began to flip through the photographs. Suddenly he stiff-

ened. He held out the letter which had contained a sizeable sum in cash, a letter addressed to one Josef Skladal in Prague.

"Is this Staff Captain Skladal?" he demanded.

"Yes, sir." The intelligence officer had already done his homework.

"But I know him personally," said the General.

The intelligence officer knew this fact too. Skladal was assigned to the staff of the First Army. He worked on mobilization plans. He had never been under suspicion, and his superiors described him as an efficient, devoted, and promising officer.

"He must be arrested immediately!" ordered the General. "I shall not tolerate an enemy spy in so delicate an assignment. We could never recover from the damage that he could do. I want him locked up in one hour's time."

"But then, sir, we should lose our chance to catch the others, some of them probably more important than Skladal."

"Arrest him."

"Sir, could he not be transferred to a less important assignment, a routine job, so that we can prepare the action on other grounds?"

"Arrest him."

"Yes, sir. But if we just——"

"Arrest him now! And bear this in mind in the future. There is always a category of suspects that must be arrested right away. I wish to be informed of every such case immediately. That is all."

Fortunately, the incriminating letter would not reach Skladal before Monday. Feverish efforts to find some legitimate basis for a house-search — careful examination of all possible files, questions asked of Skladal's friends by other acquaintances over the week-end, a twenty-four hour surveillance — were all fruitless. But there was no alternative. The major who entered Skladal's apartment shortly after eight on Monday morning produced a search warrant and prayerfully began his quest. Although he immediately recognized the letter on the desk as that which had been in his hands on Saturday, he paid it no attention. His search was aimed at other evidence, and it was successful. Three other letters from Budapest were found, as

well as a large sum in Hungarian pengoes and Italian lira for which Skladal could give no satisfactory explanation.

The traitorous captain hesitated for a short while after his arrest, but soon made a full confession. He had betrayed to the Hungarians everything he could put his hands on, including several important communications concerning Czech mobilization plans. Painfully he explained that his wife's beauty was matched only by her extravagance. He was told that suspicion had indeed arisen about him because he and his wife had lived beyond their means. This precaution, however, was unnecessary: Captain Skladal never came to trial. Some days after his arrest he hanged himself in his cell.

There remained the possibility that Budapest might change its procedures after Skladal's arrest and suicide not because it suspected that the attaché channel had been compromised but just as a matter of general principle. It was therefore with great relief that inconspicuous surveillants saw the dapper Colonel Ujszaszy emerge from the Hungarian Embassy, two weeks after his last appearance, promptly at eleven a.m. and march across the street, eight letters in his left hand. In fact, the entire incredible performance remained unchanged for two years. Fifty-three times the Czechs picked up the post every second Saturday from the same mailbox. Once the Hungarian colonel was ten minutes late for his entrance on scene with the letters, frightening the Czechs quite badly with this radical departure. But the aberration was not repeated.

The Catch

During those two years, summer of 1936 to summer of 1938, the Czechs arrested 253 Hungarian agents without tipping their hand. All categories were picked up: sub-sources, sources, couriers, cut-outs, bird-dogs, letter-drops, W/T operators, and the rest. Some were important and others were comparatively insignificant, but all were dangerous. Yet some were allowed to remain free, under close observation; these were agents whose main task it was to report on the course of Czechoslovak mobilization and the movement of troops. They were all arrested later in 1938, the day before mobilization was proclaimed. The accumulation of letters had provided a wealth of detail about these spies. Czech intelligence knew their names and addresses, their targets and assignments, their communications

inside and outside the CSR, the extent to which Budapest was pleased or dissatisfied with their work. The base for which each worked was known: Miskolcz, Komarom, Budapest, Jaeger, and outpost Vienna. For many even the amount of pay was determined.

The Hungarians had introduced secret ink for the protection of their major assets. But this ink, always the same, could be brought out readily by an ordinary developer or by ultra-violet. Every agent was provided with this same ink and with its developer. The process was so unsophisticated that the Czechs would have worried about provocation or a saturation operation had not the information derived from surveillance and arrests set their minds at ease. And the secret ink and developer, in turn, greatly facilitated arrest, for the search of the agent's quarters never failed to unearth both, and the effect of the discovery was usually so shattering that confession followed quickly.

Nine secret Hungarian transmitters were pinpointed on Czech soil. Armed with information from arrests and surveillance, the Czechs moved in on the six of these which were used for peacetime reporting. They seized the codes and operating instructions for each set, doubled each W/T operator, and kept the Hungarian cryptographers busy decoding well-planned deception material. The remaining three sets, which had orders to maintain silence until mobilization, were not picked up until the political tension reached its peak.

Of the two hundred and fifty-three agents some were especially dangerous for Czechoslovakia:

Lt. Colonel Opocensky was a general staff officer of exceptional ability. After fulfilling a very important assignment in the First Section of the General Staff, the section dealing with organizational matters, he became Chief of Staff of the Fifth Infantry Division in Ceske Budejovice. He was a personal friend of the chief of Czechoslovak military intelligence. He had served in the Serbian Army in World War I and had been known ever since as a brave soldier and profound patriot. The Czech General Staff, rocked by his arrest, remembered uneasily the case of Colonel Alfred Redl, the treasonable Austrian counterintelligence chief who committed suicide after his exposure shortly before World War I.

Lt. Col. Opocensky had not been compromised by Col. Ujszaszy's letters. Budapest had communicated with him directly, by courier. The courier, a stranger, was spotted in conversation with Opocensky, and after a quick preliminary check was picked up for questioning. Though he said nothing about Opocensky, he did confess that he worked for the Hungarian service. Czechoslovak counterintelligence then planned a full surveillance of the lieutenant colonel, but again the Chief of the General Staff intervened with an order for immediate arrest. Opocensky explained his single contact with the courier plausibly, but while the interrogation was going on Czech counterintelligence beavers were at the old job of mining the files. Among the books they examined was one kept by the duty officer, in which anyone who entered the General Staff building during off-duty hours had to sign his name, the time of entry, and the time of departure. The interrogator himself knew that in 1936 Opocensky had visited his office one Saturday evening and spent more than an hour there. There was no corresponding entry in the register. Skillful exploitation of this slender lead finally elicited from Opocensky the admission that he had been an agent of the Hungarians for more than two years. Soon thereafter, and before the interrogation was concluded, he died of a heart attack. The cause of his treason was established, however, before his death: he had been deeply in debt.[1]

Lt. Colonel Josef Kukla had worked for the Hungarian service for five years before his arrest. He had been recruited while stationed in a Slovak garrison in Banska Bystrica. The damage which he did to his country was far less than that done by Opocensky, because Kukla's highest post, deputy commander of the First Cavalry Regiment in Terezin, had not enabled him to become privy to major secrets. In consequence his correspondence from Budapest had passed through Colonel Ujszaszy. As in the other cases, Czech intelligence carefully prepared independent evidence through surveillance before moving in to

[1] A year after Opocensky's death a member of a surveillance squad rushed into headquarters, white-faced, to report that he had seen Opocensky clamly strolling down a Prague street at high noon. The squad captain eyed him coldly, unable to decide whether the report was born of dementia praecox or demon rum. But a quick check of the files showed that Opocensky had had an identical twin.

arrest him, but it turned out that these collateral facts were not needed: Kukla confessed promptly and fully. In return the Czech service told him how to preserve his pension for his wife and three children. He followed the advice and committed suicide before his trial.

Antonin Medricky, who lived in Sternberg, Moravia, was a wealthy man, much respected in his home town for both his charity and his cash. He too was uncovered through the Ujszaszy intercept program. But Czech counterintelligence, having prepared the case carefully, ran into an unexpected barricade: police cooperation was essential because Medricky was a civilian, and the local police stoutly refused to believe that so upstanding a citizen could be a spy. When this difficulty was finally surmounted and Medricky was tried, he was sentenced to twenty-five years in prison. Not long thereafter, however, when the Germans occupied Czechoslovakia, Medricky the Magnificent was freed and undoubtedly served his liberators well.

Other cases can be capsuled by the dozens: the drunkard Burda, for example, who was useful to the Hungarians because he served as a non-commissioned officer in a border-guard battalion. Or the former Austrian, Captain Stoces, who held one of the three radio transmitters that were supposed to go on the air when war started. Both were hanged. But today's reader of these files is likely to find the repetitive tales of treason less interesting than the precision with which the Czechs exploited the patterned regularity of procedure adopted by Hungarian naiveté. Then abruptly, in the regular simplicity of these patterns, a jagged gash was torn.

Epilogue

In the late summer of 1938 the beautiful young mistress of Colonel Ujszaszy was found dead in his villa — murdered. The colonel, confronted with this delicate situation, made a straightforward decision: he consulted the chief of Czech counterintelligence. The latter managed to call off the police, a simple matter because those involved were Hungarians and because Ujszaszy was on the diplomatic list. This episode gave the Czechs a hold on a hostile attaché which should have afforded them monumental opportunities. But how could Ujszaszy possibly serve them better than at present? Forcing

him to serve as a witting accomplice would have been a sure way to destroy the valuable operation in being.

While the Czechs were wracking their brains over this problem, Ujszaszy and Kovacs were recalled from Prague. Kovacs was recruited by the Czechs before he left. Ujszaszy, for his arduous and subtle labors, was suitably rewarded by a grateful government. He was made the G–2, Chief of the Second Section of the Hungarian General Staff.

The colonel's successor in Prague was a Major Somogyi, and the Czech counterintelligence operatives discovered soon after his arrival, to their grumbling dismay, that they would have to start earning their salaries. Major Somogyi left the embassy at unexpected times, drove his own car, and dropped the letters one by one in widely spaced and constantly changing mail boxes, some of them far outside the city. He also checked for signs of surveillance. His conduct was so circumspect that the rueful Czechs concluded that, unlike Ujszaszy, he had never been trained by the Hungarian intelligence service. The intercept operation became so complicated that efficiency dropped sharply, and the number of letters recovered grew smaller and smaller.

The dwindling operation was soon overtaken by history. The situation of Czechoslovakia turned from critical to tragic. Hitler screamed his demands for the incorporation of the Sudetenland into the Third Reich. Chamberlain went to Munich in Operation Umbrella. The Germans moved in. Life went on under the shadow of the Gestapo; and when the Communist secret police, after a brief interregnum, replaced the Gestapo in 1948, they put their trainees to studying the story of the Mail from Budapest, that they might derive instruction from the blunders of the one side and the skills of the other.

THE GREATER BARRIER

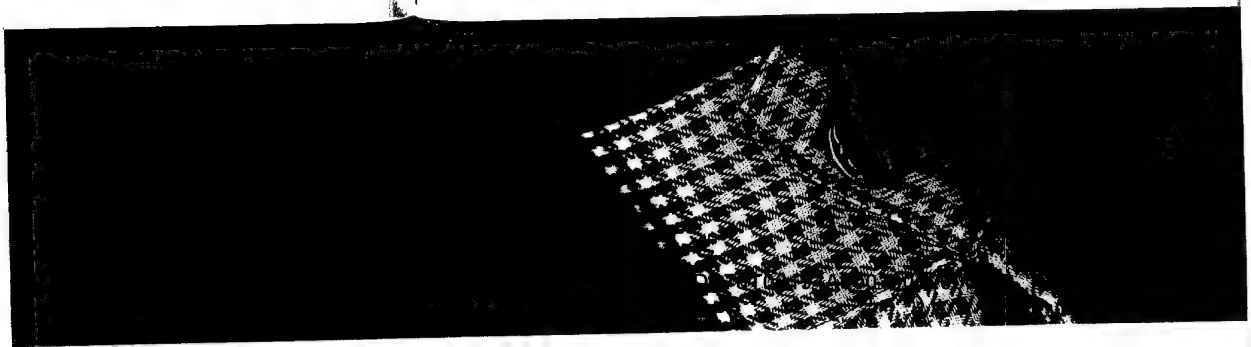
Among the practitioners of the Intelligence Arts there are few who will be surprised when the mechanical translation of languages leaves the laboratory and becomes operational. Indeed, this breakthrough of the foreign language barrier is so close upon us that some of our forward-looking administrative assistants should be working now on appropriate staff studies — "The Redistribution of No-Longer-Necessary Personnel," for example.

It is not the purpose of this paper to analyze the vast intelligence implications of the availability of mechanical translation, but one cannot contemplate the subject even in passing without catching a glimpse of the inevitable extrapolation of its techniques as it progresses from bulky machines and visual translation to pocket-size portables and instantaneous audible translation. The foreign language barrier, once breached, will be utterly shattered; foreign language competence will become largely academic and archival, and the foreign language specialist will join the buggy whip and the piston-driven aircraft engine as a relic of yesteryear.

There are, of course, those cynics who doubt the operational practicability of mechanical translation. One of them recently published a probably spurious account of a laboratory performance of the translation mechanism. According to the story, the laboratory scientist had selected for the trial run — to take its place in history alongside "What hath God wrought?" and "Come here, Watson, I want you" — the sentence, "The spirit is willing, but the flesh is weak." The machine, the source reports, hummed for a few seconds and produced a foreign language statement to the effect that "the liquor is agreeable, but the meat is insipid."

We scarcely need remind these doubting Thomases of all the great new ideas at which their spiritual ancestors laughed. Mechanical translation will come. The handwriting is on the wall — and it matters not in what language.

Perhaps, then, the time is upon us when we should face and begin to penetrate a barrier even greater than that of foreign languages — the English language barrier.



The Invisible Curtain

The perceptive reader will have noted the duality of our verb — "face and begin to penetrate." The implication is, and is intended to be, that we have a dual mission: we must first face the English language barrier before we can begin to penetrate it. For it is in facing it and recognizing that it does, in truth, exist that we become conscious of how formidable this Barrier is.

Our first reaction to the proposition that the English language is an imperfect tool of communication is one of tolerant dismissal of the preposterous. We point to the vast treasury of literature in the language. We mention a few of the great masters — Chaucer, Shakespeare, Conrad, O'Neill, Wolfe, Spillane. We may even quote a sentence or two to demonstrate the capability of the language to convey great meaning with few words — "The time is out of joint," for example. And this reaction would be quite proper if we were discussing the English language as an instrument of evocation. It is indeed an evocative language. Only music, perhaps, has greater powers of empathy. But how good is the language as a precision tool in communication? How well does it do the job that is the basic one in the intelligence business — the ordering, reporting, analyzing, and interpreting of information?

To provide an oversimplified illustration of the problem, let us meet ourselves on our own ground. The reporter who ascribed the lament that "the time is out of joint" to a certain source also ascribed to him the admonition — addressed to an attractive young lady — to "get thee to a nunnery." Now most readers would interpret that exhortation as the compassionate solicitude of a sensitive young man, acutely aware of the out-of-jointness of the times, the rottenness of his environment, and the duplicity of humankind, for the welfare of his beloved, anxious that she seek sanctuary in some unsullied cloister. The student of Elizabethan semantics, however, knows that in the language of the day the word "nunnery" was commonly used to refer to a bawdy house and the young man was in effect telling the young lady to go jump in the lake — a piece of advice which, you will remember, she took.

We shall not belabor the point. Let the reader accept for the moment an at least eminently defensible proposition: in

the English language it is extremely difficult to use words in contextual sequence which mean to all people precisely what the user intended them to mean; it is extremely difficult to use the language so that it cannot be misunderstood; the language, therefore, is an imperfect tool of expression and constitutes a Barrier to communication.

Granting the existence of the Barrier, we may be inclined to dismiss it as one of life's inevitabilities — like death, taxes, and power lawnmowers. These things we have always with us; we get along with them as best we can, and it is folly to fight them. Now this attitude of resigned complacency may be acceptable in most walks of life. It may be a firm enough foundation on which to base the equanimity that satisfies most of us as a substitute for a real coming-to-terms with life. But is it acceptable in the intelligence business? Can we admit the existence of the Barrier and then do nothing about it? Consider for a moment just a few phases of our business in which we bruise ourselves against the Barrier.

Behind the Curtain

Take first the most critical end-product of intelligence, its predictive conclusions. By the very nature of their subject-matter these conclusions must be qualified ones; they are guesses supported in varying degrees by information of varying accuracy supplied by sources of varying reliability. And the guesses themselves are made by men of varying perceptivity. In lieu of more explicit language, we call these guesses "estimates." Estimates of future situations are useful only when coupled with indications of the degree of certainty attached to their predictions, and this predictive certainty is expressed in qualifiers. It follows, then, that an estimate is useful only to the extent that it is precisely qualified.

Now, what tools do we have to work with to make these precise qualifications? Well, we have the words "probable," "possible," "likely," "certain," and their antonymic forms; we may qualify these qualifiers with the words "very," "slightly," "surely," "almost," "highly"; we have the phrases "it is believed that," "it is concluded that," "the available evidence indicates that," and a dozen others. These, then, are the tools; and considering the importance of the job that has to be done with them, they are very dull tools indeed.

For example, let us consider "possible" and "probable." Our estimate is to the effect that "it is *possible* that A (a substantive element) will B (a predicative element)" or that "it is *probable* that A will B." Just how much information has been communicated? Practically anything is *possible*; and how probable is *probable*? In order to make these expressions meaningful, we have to set up a mathematical scale of possibility-probability: *possible* means less than a 50–50 likelihood that A will B, and *probable* means more than a 50–50 likelihood that A will B. By the addition of the qualifying words that qualify the qualifiers — barely, slightly, highly, certainly — and the assignment of values to these, we can calibrate our scale down, perhaps, to units of tens. But thus we have left the realm of language and sought succor in mathematics in order to arrive at the crudest kind of precision.

Now let us consider "the available evidence indicates that . . ." — often the only honest thing an intelligence analyst can say about an estimate. Even though his statement is buttressed by meticulous documentation, his communication has been approximate rather than precise. Like the history pupil's generalization that "Queen Elizabeth was the Virgin Queen of England; as a Queen she was a great success," the analyst's statement contains implications of inadequacy. The word "available" suggests, of course, that probably there is a large body of evidence not available, evidence that may or may not "indicate that . . ." The word "indicates" may have a flavor of certainty, like "shows," or carry an odor of doubt, like "suggests." In short, the limitations of the language prevent the analyst from communicating that fine balance of scholarly honesty and intuitive conviction which underlies the estimate.

Now we still might plead for tolerance of the Barrier on the grounds that the estimative phase of intelligence is inherently precarious, that no tool of communication could be devised which would probe the shadowy recesses that lurk behind the intelligence estimate, that perhaps it is better left imprecise. But such a plea is stilled by even a cursory glance at the language in action in virtually any other phase of our business.

Consider the fitness report. The Barrier is so formidable here that again we have been forced to seek the aid of mathematics. And even with digital assistance we cannot avoid

inadvertent damnation or beatification. Consider chain-of-command memoranda. An Assistant Director informed a Division Chief that he was "forwarding the following papers . . . which may render themselves to the fulfillment of the concept described in the referenced memorandum" — not only a lofty flight against the Barrier but a resounding proclamation of its existence. Consider the compounding of confusion that is the inevitable result of any attempt to define and use the word "capability," an attempt that must always end with Humpty Dumpty's assertion that "it means just what I choose it to mean — neither more nor less."

Spying the Land

Having established the existence of the Barrier and having — reluctantly, perhaps — admitted that something should be done about it, the next phase of our mission should be doing something about it. But let us not be hasty. Let us not attack so formidable a foe without careful reconnaissance. The actual penetration of the Barrier is a massive task; an impetuous frontal attack might lead us into the familiar fatuousness of the Carnegiens, who simply obscure the Barrier with a cloud of sound swirled about by calesthenic agitation, or into the folly of the plain-words, plain-letters pedants, who counsel blindness to the Barrier and restriction to the parochial borders of our current verbal competence.

Our first cautious step in reconnaissance might be the determination of the point at which the Barrier should be attacked. In the intelligence business the major medium of communication is written English. Oral communication is important, of course, but it is definitely a secondary medium, and virtually every oral communication emerges from, passes through, or enters into written form. Oral communication, moreover, is not language alone. It is language supported by the substantial crutch of audio-visual aids — aids that range from the rising inflection and the raised eyebrow to the blackboard and the animated flow chart. It is in written communication that we must rely wholly upon the language; it is here that the inadequacy of the tool is most apparent; it is here that the Barrier must be attacked.

Now perhaps the next step in our reconnaissance is an appraisal — agonizing, if you like the cliché — of some of the factors in our past failures to achieve a breakthrough. Obviously there are a host of these factors, and within the scope of this paper we can do little more than identify some of the major ones.

First of all, certainly, is the factor of self-exculpation. Those of us who admit and lament the inadequacy of written English are confident that we are not the ones for whom the bell tolls. Our defenses are manifold — and manifestly shallow. We are well educated, we say, with our tendency to equate writing ability and education. Actually, there is little relationship between them. One can — and many do — acquire two or three academic degrees without ever having mastered even the rudiments of effective written language communication. Some of us base our defense on pragmatism: we have got along in life quite well with our ability to write; therefore that ability must be of a rather high order. With equal logic we could claim competence in electronics on the basis of having used radios successfully. Individually, of course, we have different degrees of culpability, but there is a difference in degree only. None of us is without sin.

A second significant factor is the Literary Bent. Most of us, when we put pencil to paper or fingers to typewriter, are infused with the compulsion to create literature — to relegate communication to a secondary role and to feature the elegant phrase and the meaningful metaphor. In its mildest manifestation the Literary Bent makes us write "inception" when we mean "beginning," "terminal" when we mean "last," and "penultimate" when we mean "next-to-last." As the Bent becomes stronger, instead of "joining," "finishing," and "separating" things, we "marry," "consummate," and "divorce" them; the Freudian overtones no doubt lend sophistication to the language. In its most purulent form the Literary Bent leads us into juicy phrases such as these, which prosaic editors have culled from the finished drafts of intelligence reports:

Gone were the halcyon days of loose talk about the mighty upsurge in the output of consumer goods . . .

The veil of secrecy is so thickly meshed in the Iron Curtain . . .

The New Lands was a virgin area pregnant with possibilities for development.

Still another factor is the vaunted Viability of our language — its ability to grow, to change, to adjust itself to the needs of the times, to cast off the grammarian's chains and take flight into new spheres. This Viability, incidentally, has been rediscovered with tiresome regularity by bright young university instructors who write Sunday Supplement articles which advise us that we should not hesitate to judiciously split an infinitive should we choose to and that a preposition is not a bad thing to end a sentence with and that there is no real need to end a sentence anyway until we have said everything that seems to be related to the idea that we are concerned with.

Now this linguistic chameleonism is all very well when we are concerned with the evocative power of the language, but it wreaks havoc with communication. We hold no brief for slavish conformity to the dicta of the grammarians; we split infinitives at times, we end some sentences with prepositions, and we begin some sentences with coordinating conjunctions. But we feel that unilateral and indiscriminate departure from accepted patterns defeats the purpose of language. Too often the relationship between writer and reader becomes a game of "what's my meaning?" A decade or two ago the word "since" meant *since* and the word "while" meant *while*; now, "since" may mean either *since* or *because* and "while" may mean either *while* or *although* — depending on the writer's intention, an intention often determined only by a brisk deciphering exercise. Examples of this take-your-choice kind of diction are literally legion (the word "literally" here means literally, not figuratively) and the language game has just about reached the point at which the writer should provide parenthetic guidance — "Since (meaning because) the ore body lies under (meaning beneath) over (meaning more than) 160 feet of overburden (in this term, over means above [meaning on top of (referring to position in space)]) and is under (meaning less than) 6 percent metallic content, it is not too (meaning very) profitable to exploit."

Self-exculpation, the Literary Bent, and the Viability of the language are a few of the many factors that adversely affect our capability to penetrate the Barrier. The reconnaissance should be exhaustive, and it must be if we are to begin our attack with any degree of confidence in the outcome.

It is at this point, perhaps, that the strategist should retire and leave the field to the tactician. And surely, with the very life of the intelligence business at stake, the tactician who has plotted the destruction of the foreign language barrier will rise to this greater challenge posed by the English language.

COMMUNICATION TO THE EDITORS

Dear Sirs:

The rather iffy article on the origin and consequences of Antietam that appeared in the Winter 1958 issue of *Studies* merits some comment. In their haste to turn the Confederate tide at Sharpsburg, its authors have fallen into significant errors of fact and interpretation. Several basic facts were not quite as they presented them; certainly, the consequences of Antietam were at once both minimized and overstated.

It is fair to say that the discovery of Special Orders 191 brought on the battle at Antietam Creek if this means it got McClellan out of his camp chair and onto his horse. To that extent, at least, the finding of the lost order was an intelligence coup. The authors, unfortunately, have little to say about — although they do hint at — the effect of earlier, false intelligence reports on the outcome of this battle.[1] Antietam demonstrated the damage that can be done by false intelligence, even long after it is reported.

McClellan's intelligence chief, Allan Pinkerton, had earlier convinced him that Lee's forces greatly outnumbered the Army of the Potomac. Perhaps this false intelligence played in some way on a fatal flaw in McClellan's character. In any case, it had permitted General J. B. Magruder's song-and-dance on the road to Richmond during the earlier Peninsula campaign, when the lines before the Confederate capital were held by Magruder's drum-beating, bugle-blowing companies marching around and about to raise clouds of dust, while Lee shifted the bulk of his forces to McClellan's flank. Bemused by his intelligence service, McClellan saw these play-actors as a vast army.

[1] The authors' original manuscript, before it was cut for publication in the *Studies* at the editors' request, did in fact touch on these intelligence failures, referring to the "120,000 seasoned troops which Pinkerton reported to be under Lee's command" and noting that "Lee's soldiers tended to straggle, and Lee never could count effectively at any given moment on more than 75 percent of his total listed force. . . ." — Editor

McClellan's deliberate movement across South Mountain and his slow deployment along Antietam Creek on 16 September show this same fatal psychology at work. Instead of the divisions that peopled McClellan's imagination on 16 September, his host faced not more than 18,000 men, poorly equipped in everything save courage. McClellan simply waited around while Jackson came in from Harper's Ferry. On the following day, the Army of the Potomac paid the bloody price that is sometimes demanded by poor intelligence, and threw away an opportunity to win a decisive victory.

Meanwhile, what of Lee? Several days earlier the Army of Northern Virginia in its turn had been misled by false information: a report that a Union column was advancing south from Chambersburg. Lee's scattered force were further dispersed by the dispatch of Longstreet to hold Hagerstown in the face of this imaginary threat. News of McClellan's unexpected advance beyond Frederick — brought in by J. E. B. Stuart — forced Lee to quick decisions. He moved D. H. Hill back to South Mountain, ordered all units to concentrate at Sharpsburg and urged the quick reduction of Harper's Ferry. Lee's plan at the moment called for retreating his army across the Potomac without giving battle. Only the fall of Harper's Ferry on 15 September and the prospect of rapid concentration of his scattered units decided Lee to make a stand. The final decision to fight at Antietam, therefore, was made by Lee alone.[2] He was not cornered against the river and forced to fight.

The authors seem to be wrong also in their belief that Lee was spurred to action by knowledge that McClellan had found Special Orders 191. Tradition has it, to be sure, that a citizen of Frederick reported the discovery to Stuart, who passed the information at once to Lee. But the fact is, according to Douglas S. Freeman, the foremost authority on Lee's military career,

[2] The full version of *Lost Order, Lost Cause* stands in oblique agreement with this last sentence: "Lee's limitations in numbers of men and quantity and quality of equipment were not so great as to encourage him to jettison his original plans. Strategic considerations still remained in favor of the South. . . ." It also takes into consideration one of Mr. Rondeau's later points: "Lee's limitations lay in the bare feet and empty stomachs of his troops. . . . Daily marches of 15 miles on hard, gravelly Maryland roads with a diet of green corn and green apples. . . ." — Editor

that Lee knew nothing of his loss until the publication months later of McClellan's report on the battle (*R. E. Lee,* II, 369, note 72).[3] Lee, then, made his decisions in the light of the situation as he saw it, and without knowledge that his order had been lost. That romantic document has had more effect on later generations of scholars than upon the course of events at Antietam.

It is not, in my opinion, correct to consider Antietam an unqualified Union victory. It was, rather, a stalemate. Lee remained on the field, a whole day after the battle, awaiting McClellan's attack. McClellan, in his turn, apparently expected Lee to take the offensive. The retreat across the Potomac resulted from Southern shortage of men and supplies, and from the necessities of maneuver. An army which inflicted on its adversary casualties equal to one-half of its own strength, stayed a day on the battlefield, and then quickly stamped out a timid effort at pursuit was not "sent reeling back into Virginia." The men who went back across the river may have damned "My Maryland," but they did not consider themselves defeated.

Your authors have likewise misinterpreted the significance of Antietam. It was not the high noon of the Confederacy. The Confederate invasion of the North and the Southern cause were doomed to ultimate failure for reasons more prosaic than Yankee gallantry at Sharpsburg. As early as September 1862 the basic cause of the ultimate Southern defeat was foreshadowed in the appearance of the Army of Northern Virginia as it crossed the Potomac: tattered, shoeless men, hungry horses, broken wagons, inadequate artillery. The only neat thing about these storied "tatterdemalions" was their gleaming muskets. On 16 September, while McClellan deployed along

[3] Since this letter went to press the writers of *Lost Order, Lost Cause* have called my attention to Douglas Freeman's later conclusion that, during the night of 13–14 September, Stuart had notified Lee of the Federal discovery of S.O. 191 (Freeman, *Lee's Lieutenants,* II, appendix I). I appreciate their correction of my oversight. Lee's knowledge of his loss, however, beyond possibly giving greater urgency to his decisions, seems to have played little part in subsequent events. He made his decision for a stand in Maryland, nevertheless. McClellan and his commanders must bear the responsibility for failure to exploit their intelligence find. — J. R.

Antietam Creek, Lee himself rode down the line to caution his artillery against wasting shells in aimless bombardments. Northern industrial strength, coupled with the blockade of Southern ports (the effects of which were already visible), and later Northern ravaging expeditions brought about ultimate Southern defeat. Antietam, Gettysburg and Vicksburg were not themselves decisive battles, but rather reflected the true cause of growing Southern weakness.

Southern straggling must also be considered in any audit of the books of the first invasion campaign. Thousands of Southern troops did not approve of an invasion of the Union; they had enlisted only to defend their homes. They voted against the campaign simply by remaining behind the river. Other thousands fell out because they could not march on the stone roads of Maryland without shoes. Hard Maryland roads were a major reason for the failure of the first invasion. An army that numbered 53,000 after Second Bull Run could muster less than 40,000 on the Antietam a few weeks later. It is interesting also that the high command of the Army of the Potomac seemed never to take into consideration the mass Southern straggling, at least in Maryland, which must have been evident to many Union sympathizers. Wasn't this, too, a failure of intelligence?

I agree that the Army of Northern Virginia failed to arouse great sympathy among invaded Marylanders. This failure, I think, had three causes: the tattered condition of Lee's army, the route of invasion, and the Union occupation of Maryland. Certainly, many a Marylander must have had second thoughts about joining this ragged horde (a victory for the blockade). The facts of geography dictated that the Army of Northern Virginia should invade Maryland precisely where Union sentiment was strongest. If the invasion could have been mounted to the south and east, its reception might have been different. Demonstrations of such Southern sentiment as existed in Western Maryland were undoubtedly inhibited by fear of future Union reprisals, a factor that Lee himself recognized in his dealings with the inhabitants.

Although not the decisive military conflict that your authors claim it to be, Antietam did play a significant intelligence role. It served as a backdrop for Lincoln's masterpiece of psychological warfare: the Emancipation Proclamation. For that reason alone, the war was never the same after this battle had been fought. As Bruce Catton puts it, Antietam sounded forth the bugle that never called retreat. It was, if you will, the psychological watershed of the war. Therein, I think, lies its grip on American imagination.

WE SPIED . . .

We have spied very few new books worthy of note in this issue: the summer months are usually slow ones for publishers. The exception, to which we are devoting this column, is entitled *They Spied On England.*[1] Title notwithstanding, spies and espionage are a minor element in this book based on the war diary of Maj. Gen. Erwin von Lahousen, the Austrian intelligence officer who was brought into German military intelligence after the German-Austrian *anschluss* and became chief of the Abwehr's Section II. Section II was responsible for sabotage operations, and the misleading title arises from the authors' habit of equating "saboteur" with "spy," writing for example, ". . . where the submarines which had been detailed to take the *spies* to America were berthed. There the *saboteurs* were accommodated in a small dockside hotel. [Emphasis supplied.]"

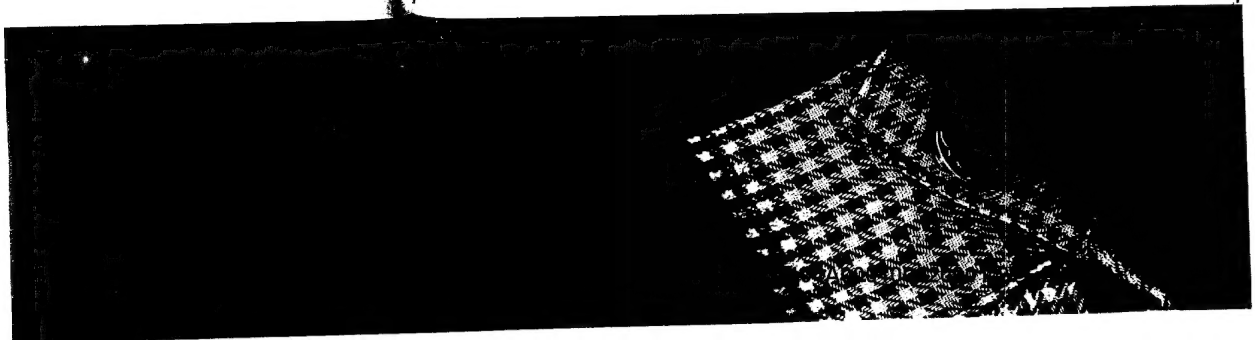
Although it is thus devoted primarily to the operations of saboteurs who occasionally engaged also in the reporting of information, the book does include at least one case-history in the field of espionage. The authors have supplemented their main source, the 400 typed foolscap pages of General von Lahousen's diary covering the war years 1939 to 1943, by interviewing many of the persons involved in the events it describes.

General von Lahousen was close to Admiral Canaris, the head of the Abwehr, and must have been aware of Canaris' connections with those engaged in the plot against Hitler. The book cites the evidence pointing to Von Lahousen as the man who supplied (from English stock he had seized) the bomb fuses used in two of the attempts on Hitler's life, evidence similar to that brought out by Gisevius [2] in discussing the unsuccessful 1943 plant in Hitler's airplane. After hearing Von Lahousen's testimony for the Allied prosecution at the Nuremburg trials, according to the authors, Göring, in the dock, exclaimed, "That's another of those we forgot to hang, Ribbentrop!"

---

[1] By Charles Wighton and Gunter Peis. (London: Odhams Press Ltd., 1958. 320 pp. 18s.) Also under title *Hitler's Spies and Saboteurs.* (New York: Henry Holt & Co., 1958. $3.95)

[2] *To The Bitter End,* pp. 468–9.



They Spied on England describes several of Section II's particular operations, including one not covered by that unfortunate title. This was the submarine landing of saboteurs in the United States, four on the Florida coast and four on Long Island, where George Dasch promptly turned himself over to the FBI and blew the whole operation. A chapter on the Nazi attempts to utilize the Irish Republican Army and other dissident Irishmen to stir up trouble for the British traces the Abwehr's growing disenchantment with this project: the Irish kept asking for arms and supplies but concentrated on advancing their own cause without regard to German interests. The story of the Welsh spy Arthur Owens illustrates the similar Nazi effort to exploit the fanaticism of Welsh nationalists. "Johnny," as Owens was known to the Abwehr, carried on successful espionage until his nerves gave way and destroyed his usefulness in 1941. The sabotage and paramilitary activities of the South African Olympic boxer, Robey Leibbrandt, are detailed in another chapter. The 1936 Olympic Games in Berlin had convinced this extreme Afrikaner nationalist that Nazi life was the life for him, and about a year after winning the South African heavyweight championship he returned to Germany to be trained for sabotage activities in the dominion. The German Foreign Ministry was also interested in him; it looked upon him as potential *führer* of a South African fifth column. His operations were successful for a time, his defiance and evasion of the South African police becoming a public scandal, but in the end his movement was penetrated by an agent of the government and he was captured. He was not released from prison until after the Malan government came to power in 1948.

The book devotes a good deal of attention to tradecraft, especially recruiting, training, and cover; the authors believe, in particular, that the problem of cover was not thoroughly thought through by the Abwehr. The kind of cover used was often appropriate enough, but the Abwehr was not always careful to provide backstopping or to brief the agent in sufficient detail to withstand interrogation. It is pointed out that in one case when the German agents were forced to live their cover for a short time before undertaking their mission, British interrogation officials were never able to crack them. The British remained suspicious of these men and kept them in-

terned for the duration, but at least their lives were saved. Another episode of interest from the tradecraft point of view is the story of two Norwegians infiltrated into England. Just as the Abwehr was on the point of sending them out, a Norwegian infiltration agent of the British service fell into its hands. From the information gained through this lucky catch, the Abwehr was able to launch successfully a sabotage penetration which otherwise would probably have ended in failure.

The access the authors had to Von Lahousen's diaries and their elaboration of the material make this book an interesting addition to the literature of intelligence operations.